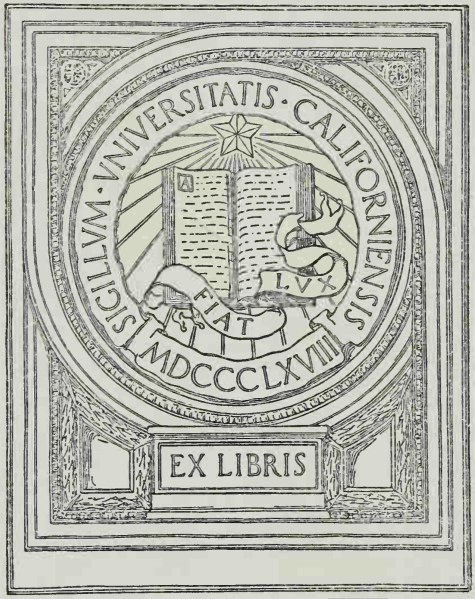
THE CAUSATION AND TREATMENT OF PSYCHOPATHIC DISEASES

BORIS SIDIS

MEDICAL SCHOOL
LIBRARY



Gift of
Mrs. C.H. Hillhouse

THE CAUSATION AND TREATMENT OF PSYCHOPATHIC DISEASES

WORKS BY BORIS SIDIS

The Foundations of Normal and Abnormal Psychology

Symptomatology, Psychognosis, and Diagnosis of Psychopathic Diseases

The Causation and Treatment of Psychopathic Diseases

The Psychology of Suggestion

Multiple Personality

Psychopathological Researches

An Experimental Study of Sleep

A Study of Galvanometric Deflections

The Nature and Causation of the Galvanic Phenomenon

Philistine and Genius

The Psychology of Laughter

The Causation and Treatment of Psychopathic Diseases

BY

BORIS SIDIS, A. M., Ph.D., M. D.

Medical Director of
The Sidis Psychotherapeutic Institute

BOSTON: RICHARD G. BADGER
TORONTO: THE COPP CLARK CO., LIMITED

Copyright, 1916, by Boris Sidis

All Rights Reserved.

UNIV OF CALIF
MEDICAL SCHOOL

MADE IN THE UNITED STATES OF AMERICA.
THE GORHAM PRESS, BOSTON, U. S. A.

RC 601
556
1916

Felix qui potuit rerum cognoscere causas,
Atque metus omnes, et inexorabile fatum,
Subjecit pedibus, strepitumque Acherontis avari.
Vergilius, Georgicæ.

Hunc igitur terrorem animi tenebrasque necessest
Non radii solis neque lucida tela diei
Discutiant, sed naturae species ratioque.
Lucretius, De Rerum Natura.

74313

INTRODUCTION

Psychopathic diseases are not hereditary—they are acquired characteristics. "Weak nerves," "a run down, exhausted nervous system," whatever the terms may mean, may overlap psychopathic conditions, but the two are by no means equivalent, much less identical. Psychopathic states are not "weak nerves" or "fatigued nerves." Above all, there is no need to obscure the matter and resort to the much abused, mystical and mystifying factor of heredity. It is easy to shift all blame on former generations, where in most cases the fault is close at hand, namely, a debased environment, a defective training, and a vicious education.

Under the rigorous conditions of primitive life individuals who have been unfortunate, and have become affected with mental troubles and emotional afflictions are mercilessly exterminated by the process of tribal and social selection. Each generation weeds out the individuals who have been unfortunate enough to fall under unfavorable circumstances, and have become mentally sick, suffering from acquired psychopathic disturbances. In primitive life the crippled, the maimed, the wounded, the sick fall by the way, and are left to perish a miserable death. In fact, the less fortunate, the wounded and the stricken in the battle of life, are attacked by their own companions—they are destroyed by the ruthless social brute. The gregarious brute has no sympathy with the pains and sufferings of the injured and the wounded. The faint and the ailing are destroyed by the herd.

Civilization, on the other hand, tends more and more towards the preservation of psychopathic individuals. We no longer kill our sick and our weak, nor do we

abandon them to a miserable, painful death—we take care of them, and cure them. Moreover, we prevent pathogenic factors from exercising a harmful, malign social selection of the "fit." We do our best to free ourselves from the blind, merciless, purposeless selection, produced by pathogenic micro-organisms and by other noxious agencies. We learn to improve the external environment.

We do not condemn people to death, because they are infected with smallpox, typhus, typhoid bacilli, or because of an infected appendix. We no longer regard them as sinful, unclean, accursed and tabooed. We vaccinate, inoculate, operate, and attempt to cure them. By sanitary and prophylactic measures we attempt to prevent the very occurrence of epidemics. Our valuation of individuals is along lines widely different from those of the stone age and the cave man. We value a Pascal, a Galileo, a Newton, a Darwin, a Pasteur, and a Helmholtz far above a Milo of Croton or an African Johnson.

Civilization is in need of refined, delicate and sensitive organizations, just as it is in need of galvanometers, chronometers, telephones, wireless apparatuses, sensitive plates, and various chemical re-agents of a highly delicate character. We are beginning to appreciate delicate mechanisms and sensitive organizations. We shall also learn to train and guard our sensitive natures until they are strong and resistant to the incident forces of an unfavorable environment. The preservation of psychopathic individuals accounts for the apparent increase of neurotics in civilized communities.

It may be well to add that, although the occasions for sudden, intense, overwhelming shocks are not so prevalent in organized societies as they are in primitive savage communities, the worries, the anxieties, the

various forms of slow, grinding fears of a vague, marginal, subconscious character, present in commercial and industrial nations, are even more effective in the production of psychopathic states than are the isolated occasions of intense terrors occurring in the life of the primitive man of the paleolithic or neolithic periods.

In my works I lay special stress on the fact that the psychopathic individual has a predisposition to dissociative states. Early experiences and training in childhood enter largely into the formation of such a predisposition. Still, there is no doubt that a sensitive nervous system is required,—a brain susceptible to special stimuli of the external environment. This, of course, does not mean that the individual must suffer from stigmata of degeneration. On the contrary, it is quite possible, and in many patients we actually find it to be so, that the psychopathic individual may be even of a superior organization. *It is the sensitivity and the delicacy of nervous organization that make the system susceptible to injurious stimulations*, to which a lower form of organization could be subjected with impunity. An ordinary clock can be handled roughly without disturbance of its internal workings, but the delicate and complicated mechanism of a chronometer requires careful handling and special, favorable conditions for its normal functioning. Unfavorable conditions are more apt to affect a highly complex mechanism than a roughly made instrument. It is quite probable that it is the superior minds and more highly complex mental and nervous organizations that are subject to psychopathic states or to states of dissociation. Of course, unstable minds are also subject to dissociative states, but we must never forget the fact that highly organized brains, on account of their very complexity, are apt to become unstable under

unfavorable conditions. A predisposition to dissociation may occur either in degenerative minds or in minds superior to the average. *Functional psychosis requires a long history of dissociated, subconscious shocks, given to a highly or lowly organized nervous system, dating back to early childhood.*

As Mosso puts it: "The vivid impression of a strong emotion may produce the same effects as a blow on the head or some physical shock." We may, however, say that no functional psychosis, whether somopsychosis or psychoneurosis, can ever be produced simply by physical shocks. *In all functional psychoses there must be a mental background, and it is the mental background alone that produces the psychosis and determines the character of the psychopathic state.*

The basis of functional nervous or psychopathic maladies is essentially a pathological process involving the nervous system in as definite a way as the invasion and infection of the organism by various species of bacteria, bacilli, and other micro-organisms which attack the individual during his lifetime.

Like infectious diseases, psychopathic deviations, abnormalities, and excesses are *acquired* by the individual in the course of his relations with the external environment, and are as real as syphilis, smallpox, diphtheria, cholera, and the bubonic plague. To regard them as imaginary, or to relegate them to the action of Providence or to heredity is theoretically a misconception, and practically a great danger to humanity.

There is nowadays a veritable craze for heredity and eugenics. Biology is misconceived, misinterpreted, and misapplied to social problems, and to individual needs and ailments. Everything is ascribed to heredity, from folly and crime to scratches and sneezes. The

goddess Heredity is invoked at each flea-bite—*in morsu pulicis Deum invocare.* Even war is supposed to be due to the omnipotent deity of Heredity. Superior races by their patriotism and loyalty destroy the weak and the helpless, and relentlessly exterminate all peaceful tribes. Such warlike stock comes of superior clay. The dominant races have some miraculous germ-plasm (chromatin) with wonderful dominant "units" (chromosomes) which, like a precious heritage, these races transmit, unsullied and untarnished, to their descendants. Wars, carnage, butcheries make for progress, culture, and evolution. Our boasted civilization with its "scientific" business thoroughness and its ideal of "efficiency" attempts to carry into effect this quasi-evolutionary doctrine—this apotheosis of brute force under the aegis of science. The eugenic belief is really a recrudescence of the ancient savage superstition of the magic virtues of noble blood and of divine kingly stock.

All nervous, mental, neuropathic, and psychopathic maladies are supposed to be a matter of heredity. If people are poor, ignorant, superstitious, stupid, degraded, brutal, and sick, the eugenists unhesitatingly put it all up to poor stock. The eugenic remedy is as simple as it is believed to be efficacious: Introduce by legislation "efficient" laws favoring "eugenic" marriage, sterilize all the "unfit," and teach the masses control of births. The select and chosen stock alone should multiply—the millennium is then bound to come. Such is the doctrine of our medico-biological sages.

"Scientific" farmers and breeders of vegetables, fruits, and cattle are regarded as competent judges of human "breeders." Agriculturists and horticulturists set themselves up as advisers in "the business of raising good crops of efficient children." Bachelors, spinsters, and the childless generally, are specially versed in

eugenic wisdom and pedagogics. All social ills and individual complaints are referred to one main source—heredity. With the introduction of eugenic legislation, with the extermination of the socially unfit, among whom the greatest men and women may be included. with the philanthropic sterilization of the "defectives," with the breeding of good "orthodox, common stock," and with the eugenic Malthusian control of births, all evil and disease on earth will cease, while the Philistine "superman" will reign supreme for evermore.

In the Middle Ages all diseases and epidemics, all wars, all social and private misfortunes were considered as visitations of Divine wrath. In modern times our would-be eugenic science refers all ills of the flesh and woes of the mind to an outraged Heredity. The dark ages had resort to prayers, fasts, and penitence, while our age childishly pins its faith to the miraculous virtues and rejuvenating, regenerative powers of legislative, eugenic measures, sterilization, seclusion, restriction of marriage, and to the eugenic Malthusian control of births.

Our scientists in eugenics gather hosts of facts, showing by elaborate statistical figures that the family history of neurotics reveals stigmata of degeneration in the various members of the family. "The Jukes" and their ilk are trumpeted about as great discoveries of eugenic research work. Any group of individuals of various "breeds" and "families," living under the action of the same conditions, social, economical, and educational will have the same impress. Anthropology has found this out in the case of so-called "nations" and "races." The eugenic inquirers do not stop for a moment to think over the fact that the same sort of evidence can be easily brought in the case of most people. In fact, the eugenists themselves, when inquiring into the pedigree of talent and genius, invari-

ably find somewhere in the family some form of disease or degeneration. This sort of "scientific" evidence leads some eugenic speculators, without their noticing the *reductio ad absurdum*, to the curious conclusion or generalization that degeneration is present in the family history of the best and the worst representatives of the human race.

The so-called scientific method of the eugenists is radically faulty, in spite of the rich display of long pedigrees and family histories, of colored plates, stained tables, glittering biological speculations, brilliant mathematical formulæ, and complicated statistical calculations. The eugenists pile Ossa on Pelion of facts by the simple method of enumeration which Bacon and the thinkers coming after him have long ago condemned as puerile and futile. From the savage's belief in sympathetic, imitative magic with its consequent superstitions, omens, and taboos down to the articles of faith and dogmas of the eugenists we find the same faulty, primitive thought, guided by the puerile method of simple enumeration, and controlled by the wisdom of the logical *post hoc, ergo propter hoc.*

What should we say of the medical man who should claim that measles, mumps, cholera, typhoid fever, yellow fever, malaria, tetanus, and various other infectious diseases are hereditary by quoting learnedly long tables of statistics to the effect that for several generations members of the same family suffered from the same infectious diseases? What should we say of the medical advice, forbidding marriage to individuals whose family history reveals the presence of exanthemata? We stamp out epidemics not by eugenic measures, but by the cleansing of infectious filth and by the extermination of pathogenic micro-organisms.

Every human being has a predisposition to smallpox, cholera, tetanus, bubonic plague, typhus fever,

malaria, and to like infectious diseases, but there is no inherent necessity for everyone to fall a victim to the action of pathogenic organisms, if the preventive and sanitary conditions are good and proper. No one is immune against the action of bullets, cannon balls, shells, and torpedoes, or to the action of various poisons, organic and inorganic, but one is not doomed to be killed by them, if one does not expose oneself to their deadly action. Every living organism is by the very nature of its cellular tissues predisposed to the wounding by sharp instruments, or to the burning action of fire, but this does not mean an inherent organic weakness to which the organism must necessarily submit and perish. We are all of us predisposed to get injured and possibly killed, when we fall down from a high place, or when we are run over by an automobile or by a locomotive, but there is no fatalistic necessity about such accidents, if care is taken that they should not occur.

We may be predisposed to neurosis by the very nature of complexity, delicacy, and sensitivity inherent in the structure of a highly organized nervous system, and still we may remain healthy and strong all our life long, provided we know how to keep away from noxious agencies. The creed of the inevitable fatality of neurosis is as much of a superstition as the Oriental belief in the fatalism of infectious diseases, plagues, and accidents of all kinds. Such fatalistic superstitions are dangerous, fatal, because they distract the attention from the actual causes and from the requisite prophylactic measures.

We go far afield in search for the remote source of our troubles, when the cause is close at hand. We need only open our eyes to see the filth of our towns, the foul, loathsome slums of our cities, the miserable training, the wretched education given to our children, in

order to realize at a glance the source of our ills and ailments. We should lay the guilt at the door of our social order. *We starve our young. We starve our children physically and mentally.*

We piously sacrifice our tender children and the flower of our youth to the greedy, industrial Moloch of a military, despotic, rapacious plutocracy. Witness semi-civilized Europe with its lauded culture brutally shedding the blood of its youth and manhood on the altar of commercial patriotism. *It is not heredity, it is the vicious conditions of life that stunt the physical, nervous, and mental growth of our young generation.* When we are confronted with the miserable, degraded, crippled forms of our life, we fall back cheerfully on some remote grandparent and credulously take refuge in the magic panacea of eugenics.

The practical aspect is clear. Psychopathic neurosis in its two varieties, Somatopsychosis (Somopsychosis) and Psychoneurosis, is not hereditary, but acquired. We should not shift the blame on former generations and have resort to eugenics, we must look to the improvement of mental hygienic conditions of early childhood, and to the proper education of the individual.

It is easy to put the blame on grandparents,—they are dead and cannot defend themselves. Could they arise from their graves, they could tell some bitter truths to their 'degenerate' descendants who are ready to shift responsibility to other people's shoulders. It is about time to face the truth fairly and squarely, a truth which is brought out by recent investigations in psychopathology, that *the formation of psychopathic neurosis with all its characteristic protean symptoms, is not hereditary, but acquired. Neurosis arises within the life cycle of the individual,—it is due to faulty training and harmful experience of early child life.*

Future medicine will be largely prophylactic, preventive, sanitary, hygienic, dietetic. What holds true of medicine in general holds true of that particular branch of it that deals with neurosis. The treatment will become largely prophylactic, preventive, educational, or pedagogic. *It is time that the medical and teaching professions should realize that functional neurosis is not congenital, not inborn, not hereditary, but is essentially the result of a defective education in early child life.*

BORIS SIDIS.

Sidis Institute,
Portsmouth, New Hampshire, 1915.

TABLE OF CONTENTS

CHAPTER		PAGE
Introduction		*i*
I.	Psychopathic Reflexes	21
II.	Main Clinical Forms of Neuroses and Psychopathies	26
III.	The Source of Psychopathies	33
IV.	Embryonic Personality and Psychopathic Affections	38
V.	The Fear Instinct and Psychopathic States	43
VI.	Manifestations of Fear Instinct and Symptoms of Psychopathic Diseases	54
VII.	The Main Principles of Psychopathic Diseases	64
VIII.	The Law of Recession	73
IX.	The Law of Reversion	76
X.	The Process of Degeneration	81
XI.	The Impulse of Self-Preservation in Psychopathic Diseases	86
XII.	Neuron Energy and Neurosis	129
XIII.	Clinical Cases	163
XIV.	Psychognosis of Psychopathic Cases	185
XV.	Psychognosis of the Psychopathic Substratum	247
XVI.	Psychopathic Fears	280
XVII.	General Psychotherapeutic Methods	332
XVIII.	The Method of Hypnoidization	363
XIX.	Clinical Cases of Hypnoidal Treatment	376
XX.	The Hypnoidal State and Reserve Energy	396
Index		409

THE CAUSATION AND TREATMENT OF PSYCHOPATHIC DISEASES

The Causation and Treatment of Psychopathic Diseases

CHAPTER I

PSYCHOPATHIC REFLEXES

THE profound influence of the central nervous system, more especially of the cortex with its mental processes, on bodily activities, on glandular, circulatory, and visceral functions, is now firmly established by psychophysiological and psychopathological research work. As Darwin puts it: "The manner in which the secretions of the alimentary canal and of certain glands, as the liver, kidneys, or mammæ are affected by strong emotions, is an excellent instance of the direct action of the sensorium on these organs." The heart is extremely sensitive to sensory and ideosensory stimulations. Claude Bernard has shown how the least excitement of sensory nerves reacts through the pneumogastric nerve on the heart. The vasomotor system is directly acted on by the sensorium.

Early investigators (Bidder, Schmidt, Richet) observed the fact that the sight of food causes the secretion of gastric juice. Pavloff in his experiments has shown that the central nervous system acts on the secretions of the stomach through the vagi nerves that innervate its glandular activity. Pavloff made a gastric fistula in the dog, then exposed the esophagus, opened it, and sewed the cut end to the edges of the wound. Food taken by the mouth fell out through the opening, but an abundant secretion of gastric juice

was observed. There are two moments in the process of secretion: (1) The psychic moment, the perception of food and, (2) the chemical moment. According to Pavloff, the psychic moment is the more important.

By the term "unconditional reflex" Pavloff means to indicate the response which the animal with a fistula in the secretory glands reacts by secretion to a normal stimulus, such as bread, meat, and other food. By "conditional reflex" Pavloff indicates the reaction made by the operated animal to a stimulus artificially associated with the unconditional reflex. Thus during the time the animal is fed, a light is flashed or a whistle is sounded or various figures are shown to the animal, as Doctor Orbeli has done. After a series of repetition, twenty, thirty, or a hundred, the animal reacts with secretion to that artificially associated stimulus. When another stimulus is in its turn associated with that of the conditional reflex, the result is not an increase, but a total inhibition of the conditional reflex.

Savadsky modified the conclusions of the previous investigators, but he affirms the fact that an intense stimulus completely annihilates the secretion of the conditional reflex, such as is due to scratch stimulus, for instance, while a weak stimulus produces a lesser effect. He finds that the external stimulus inhibits the condition of the nerve centres. In summarizing the work of previous investigators in Pavloff's laboratory, Orbeli says: "Vasiliev and Mishtovt have shown that any phenomenon indifferent in itself may not only become a source of a new conditional reflex, but may become a special inhibitory agent in relation to the existing conditional reflexes. This quality of the nervous system to work out special cases of inhibition makes the conditional reflexes a delicate index of reactions of the organism to its external environment."

On the strength of experiments performed on the

visual reactions of the dog, Orbeli comes to the same conclusion with Vasiliev, Mishtovt, Babkin, and Savadsky.

Similarly in the experiments carried on in my laboratory on the galvanic reflex, I find that the results coincide with Pavloff's experiments on inhibition. In a letter to me Pavloff writes that he is at work on the higher activities of the brain of the dog, studying mental reactions by the methods of conditional reflexes. According to Pavloff, mental life, however complex, can be studied successfully by the reactions of glandular secretions.

An intimate relation exists between the functions of the central nervous system on the one hand and the sensory, motor, glandular, and visceral functions on the other. This vital relation, though unobtrusive to the casual observer, stands out clear and distinct in the domain of certain nervous and mental disturbances, such as hysteria, hystero-epilepsy, larval epilepsy, neurasthenia, psychasthenia. All such conditions are mental disturbances, conscious or subconscious, and are termed by me *psychopathies*,or recurrent mental states. Recurrence of the symptom complex is pathognomonic of psychopathies, or briefly, of neurosis. This essential trait of recurrence, found in neurosis, is a reversion to a low type of mental life. I refer all those who are interested in the subject to my work on the moment consciousness, studied from a psychobiological standpoint in my recent volume, *The Foundations of Normal and Abnormal Psychology*.

In psychopathic affections the disturbance consists in the formation of non-adaptive associations of central neuron-systems with receptors which normally do not have as their terminal response the particular motor and glandular reactions.

In Pavloff's experiments the flow of saliva or of gastric juice in the dog with the fistula could be brought about by association with blue light, with the sound of a whistle, by a tickle, a scratch, or by various diagrams, squares, circles, as in the experiments of Orbeli. What holds true in the case of conditional reflexes in regard to saliva and gastric juice, also holds true of other conditional reflexes formed by psychopathics. The mechanism in psychopathies is the same which Pavloff and his disciples employ in the formation of various conditional reflexes in the case of the dogs. All kinds of abnormal reactions of a morbid character may thus be formed in response to ordinary stimuli of life.

Emotions are specially subject to associations of a morbid or psychopathological character. The physiological effects of emotions may be linked by associative processes with ideas, percepts, and sensations which are ordinarily either indifferent or give rise to reactions and physiological effects of a type opposite to that of the normal. Milk may excite nausea, a rose induce disgust, red paint produce fainting, while the croak of a crow, Limburger cheese, overripened game, the smell of garlic and asafœtida may be enjoyed with delight.

The reactions of muscle and gland are like so many electric bells which by various connections and combinations may be made to ring from any sensory button or receptor, as Sherrington would put it. An object, however harmless, may become associated with reactions of anguish and distress. This holds true, not only of man, but also of the life of the lower animals.

Associations and reactions, motor, circulatory, glandular, however abnormal, formed by young animals, persist through life. This holds specially true in the case of the higher and more sensitive animal organisms, such as the mammals. All training and formation of peculiar reactions, such as various tricks, habits,

scare-habits, scare-pain reflexes depend entirely on this plasticity of the nervous system to form new associations, or as Pavloff and his school put it, to form *conditional reflexes* and *inhibitions* in regard to glandular secretions as well as to other psychophysiological reactions.

Psychopathies are essentially pathological affections of associative life. Psychopathic maladies are the formation of abnormal, morbid "conditional reflexes" and of *inhibitions* of reactions of associative normal life activity.

CHAPTER II

MAIN CLINICAL FORMS OF NEUROSES AND PSYCHOPATHIES

A brief outline of the classification of nervous and mental diseases, made by me in my various works, is of importance to a clear understanding of the etiology and differential diagnosis of the neurotic affections under discussion.

The different forms of nervous and mental diseases may be classified into *organic* and *functional.*

By *organic* affections we mean to indicate all pathological modifications of the neuron and its processes taking place in the very structure, probably in the cytoreticulum, of the nerve cell. Under this category come such maladies as general paralysis, dementia praecox, and mental and nervous affections of an involutionary and degenerative nature. Such diseases are termed by me *Organopathies* or *Necropathies.*

By *functional* affections we mean to indicate all neuron changes in which the neuron functions and their reactions to external and internal stimulations are involved in the pathological process without, however, affecting the anatomical structure of the nerve cell. The pathological changes are not permanent, recovery of normal function is possible.

Functional nervous and mental diseases may in their turn be subdivided into *Neuropathies* and *Psychopathies.*

Functional neuropathic diseases are disturbances of functioning activity of the neuron, due to defective metabolism in cellular nutrition, brought about by external, and especially by internal stimuli-secretions,

hormones, and other agencies. The pathological process in functional nervous and mental diseases produces few, if any, anatomical, structural changes in the neuron. *The pathology of functional neuropathic diseases (probably of the cytoplasm) is essentially chemico-physiological in character.*

Neuropathic diseases include maladies in which the neuron undergoes degenerative changes which at first may bring about an apparent increase, then an inhibition, and finally a complete suspension of neuron function, not terminating in the destruction of the neuron.

This follows the general physiological law that all causes which tend to destroy the vital functions of cell activity begin at first to work as stimulants and afterwards become depressants, finally ending in the total destruction of the cell or of the neuron in the case of the nervous system. Thus in many cases small doses of opium or of morphine, chloral or other toxic and autotoxic products bring about an excitement. In such cases we should increase the dose or repeat it, if we wish to obtain depressant effects. In ether and chloroform anesthesia before the deep state of anesthesia sets in there is a stage of excitement. This law holds true in the case of the process of degeneration of the nervous system in the various forms of nervous and mental diseases as in the process of the downward course of cellular disintegration.

In neuropathic disturbances neuron restitution is possible. Neuropathic affections are produced by poisons, organic or inorganic, by autotoxic products, by hyposecretion or hypersecretion, or total absence of glandular secretion or hormones in the economy of the organism. Here belong all the temporary, or recurrent maniacal, melancholic, and delusional states, puerperal mania, epileptic insanity, the mental aberrations of

adolescent and climacteric periods, periodic insanity, alternating insanities, and in general all the mental affections at present known under the description of manic-depressive insanity.

Where the disease depends not so much on the neuron itself, but on the *interrelation* of neurons in a complex system, on *association of systems* of neurons, the condition is *psychopathic* in nature. In psychopathic troubles the neuron itself may remain unaffected, may be perfectly normal and healthy. The disorder is due to associations with systems of neurons which are usually not called into action by the function of that particular neuron or neuron system.

Briefly stated:

Organopathies or *Necropathies* include a group of psychophysiological symptoms accompanied by structural, necrotic changes of the neuron, terminating in the ultimate death of the neuron systems involved in the pathological process.

Neuropathies include a group of psychophysiological manifestations due to pathological functional neuron modifications, capable of restitution through a more perfect, more normal metabolism.

Psychopathies are pathological phenomena of psycho-physiological dissociation and disaggregation of neuron systems and the resultant disturbances of aggregate functions, the neuron itself, remaining undamaged and untouched.

The Psychopathies may be classified into: Somatopsychoses or Somopsychoses and Psychoneuroses.

This classification may be represented by the following diagram (Fig. 1):

The psychopathies may present chiefly somatic symptoms, such as paralysis, contractures, convulsions, or anesthesia, hypoesthesia, hyperaesthesia of the various organs, glands, and tissues. Such mental diseases

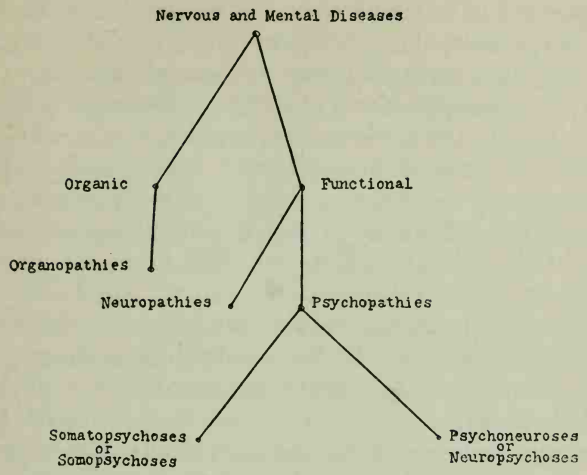


Fig. 1

may be termed *somatic psychoses*, *somatopsychoses*. The somatic psychoses or neuroses would comprise the various manifestations of what is at present described as hysteria and neurasthenia as well as the milder forms of hypochondriasis. In all such diseases *the psychical symptoms form the prominent elements of the mental malady*. The patient remains unaware of the underlying mental grounds. So much is this the case that the patient is offended, if his trouble is regarded as purely mental in character. The mental side of the diseases is then said to be submerged subconsciously.

In the *psychoneuroses* or *neuropsychoses* the physical symptoms are, on the contrary, few or none at all, while the predominating symptoms are entirely of a *mental* character. The patient ignores his physical condition, even if any exists, and his whole mind is occupied with mental troubles. Such conditions are to be found in all obsessions, fixed ideas, imperative impulses, and other allied morbid mental states. Thus

one patient is in agony over the unrighteousness of his conduct, another is obsessed by a terror of some mysterious agency, or by religious and moral scruples.

The two clinical forms of psychopathies are in strong contrast. In the somatic psychopathies or somatopsychoses, the patient brings before the physician physical symptoms—stomach derangements, intestinal pains, contractures of limbs, menstrual disturbances, affections of the sexual organs and their functions, paresis, paralysis, anesthesia, headaches, and similar bodily troubles. It is for the physician to discover the underlying mental states. In the mental forms, the psychoneuroses, the patient omits reference to his physical condition. He usually states that he has always been physically well, and some patients assert that they are sure that they will *always* be physically well, that the whole trouble is purely *mental.* "I have no physical trouble," he tells the physician, "all my troubles are mental. If you could cure me of my mental suffering, I should be perfectly happy."

The psychosomatic patient lays stress on his physical symptoms and is offended when they are declared to be mental; the psychoneurotic, on the contrary, insists on his mental symptoms, and becomes impatient when the physician pays attention to physical symptoms or to bodily functions. The psychosomatic patient believes he is afflicted with some awful, incurable, physical malady, such as cardiac trouble, tuberculosis, or some other fatal bodily, disease. The psychoneurotic, on the contrary, ignores all physical troubles, but he thinks he is on the verge of insanity. The psychosomatic seeks to be assured that he is not an incurable invalid. The psychoneurotic wants to be certain that he is not crazy. The psychosomatic wishes to know whether or no he is really and truly free from some malignant disease, some horrible infection, or some fatal physical

malady. The psychoneurotic is anxious to be convinced that he is not insane, and that he is not to end the rest of the days of his life in some retreat or asylum for the insane. *The clinical difference between the somatopsychoses and neuropsychoses is a fundamental one, and is of the utmost consequence in prognosis and treatment.*

The somatopsychoses simulate physical and organic nervous troubles. Thus, many "hysterical" forms simulate tabes, or paralysis agitans, hemiplegia, paraplegia, or epilepsy, while many of the neurasthenic, hypochondriacal, and their allied states simulate tumor or cancer of the stomach, intestinal obstructions and glandular derangements; cardiac, laryngeal, pneumonic, hepatic, splanchnic, ovarian, tubal, uterine, renal, and hundreds of other bodily afflictions.

The neuropsychoses or psychoneuroses simulate all forms of mental disease, beginning with melancholia and mania and ending with general paresis and dementia.

Psychopathic affections can be differentiated from the various forms of insanity by the following important symptom: Readiness of the patient to get an insight into his trouble. The psychosomatic and the psychoneurotic are characterized by the fact that they are anxious to learn the nature and causation of their trouble. They are eager to learn the psychogenesis of their affection, and will do everything in their power to help the physician in his examination and study of their case. Even in the cases where the idea is fixed, the obsession intense, and the impulse uncontrollable, they are anxious to listen to views different from their own, and, in fact, are always on the lookout for some help to get rid of the insistent mental states.

No matter how fixed the mental state may be, it will temporarily give way to suggestion and persuasion.

No matter how deep and intense the emotional state of the psychoneurotic and psychosomatic, it can be distracted and dissipated by the personal touch of some firm and trusted friend, or by the influence of the confidential physician who has an insight into the nature of the malady. Neither the emotions nor the ideas are immovably fixed,—they are always ready to give way to other associations. Moreover, the psychoneurotic is always ready to receive such different associations and welcomes them with all his might and main. There is a great amount of optimism in the psychosomatic and psychoneurotic. This is clearly revealed in the various religious and mental cults which often delight the heart of the psychopathic patient. There is a large amount of cheerful hope in the very make-up of functional psychosis.

CHAPTER III

THE SOURCE OF PSYCHOPATHIES

THE main source of psychopathic diseases is the fundamental instinct of fear[1] *with its manifestations, the feeling of anxiety, anguish, and worry.* Fear is one of the most primitive instincts of animal life. Our life is so well guarded by the protective agencies of civilization that we hardly realize the extent, depth, and overwhelming effect of the fear instinct. Fear is rooted deep down in the very organization of animal existence; it takes its root in the very essence of life,—the instinct of self-preservation. *Primus in orbe deos fecit timor.*

"The progress from brute to man," says James, "is characterized by nothing so much as the decrease in frequency of the proper occasion for fear. In civilized life in particular it has at last become possible for large numbers of people to pass from the cradle to the grave without ever having had a pang of genuine fear. Many of us need an attack of mental disease to teach us the meaning of the word. Hence the possibility of so much blindly optimistic philosophy and religion. Fear is a genuine instinct, and one of the earliest shown by the human child."

[1]Under "fear instinct" are included all afferent and efferent processes, sensory, glandular, and motor reactions that accompany this fundamental instinct. The sensory, glandular, and motor processes, the latter processes in the form of afferent kinaesthetic sensations, all enter in a synthetized state of what is regarded as the affective, emotional experience of fear. The sensory, glandular, and motor elements, the afferent and efferent processes, are not separate and distinct from central elements, as some psychologists and psychopathologists are apt to suppose, but these peripheral processes are intimately related to and even enter into the very constitution of the so called central elements or central affective processes of the instinct.

Similarly, Sully says: "Fear appears early in the life of the child as it seems to appear low down in the zoological scale. Fear probably appears in the vague form (*i.e.*, without any distinct representation of a particular kind of evil) in connection with presentation, *e.g.*, of strange animals, which have contracted no associations from individual experiences and which derive their emotive force from special inherited associations. Experience is, however, the chief determining factor in the evocation of fear." "Fear," says Darwin, "is the most depressing of all the emotions; and it soon induces utter, helpless prostration, as if in consequence of or in association with the most violent and prolonged attempts to escape from the danger, though no such attempts have actually been made."

The fear of coming evil, especially if it is unknown and mysterious, gives rise to the feeling of anxiety. "If we expect to suffer," says Darwin, "we are anxious." James regards anxiety, especially the precordial anxiety, as morbid fear. "The anxious condition of mind," says Bain, "is a sort of diffused terror." Fear often expresses itself through cardiac and circulatory affections, giving rise to the feeling of anxiety. *Anxiety is nothing else but the working of the instinct of fear.*

James makes an attempt to enumerate the various objects of fear in men, and especially in children. Among these he regards "strange animals, strange men, strange places, such as the fear of the sea in children who have not seen the sea before. The great source of terror to infancy is solitude. Black things, and especially dark places, holes, caverns, etc., arouse a peculiarly gruesome fear. This fear, as well as that of solitude, of being 'lost,' are explained after a fashion by ancestral experience. High places cause a fear of

a peculiarly sickening sort. Fear of the supernatural is one variety of fear. This horror is probably explicable as the result of a combination of simple horrors. To bring the ghostly terror to its maximum many usual elements of the dreadful must combine, such as loneliness, darkness, moving figures, inexplicable sounds, especially of a dismal character, moving figures half discerned, or if discerned, of dreadful aspect, and a vertiginous baffling of expectation. This last element, which is intellectual, is very important. It produces a strange emotional curdle in our blood to see a process with which we are familiar deliberately taking an unwonted course. Any one's heart would stop beating, if he perceived his chair sliding unassisted across the floor. The lower animals appear to be sensitive to the mysteriously exceptional, as well as ourselves. My friend, W. K. Brooks, of the Johns Hopkins University, told me of his large and noble dog being frightened into a sort of epileptic fit by a thread which the dog did not see. Darwin and Romanes have given similar experiences. The idea of the supernatural involves that the usual should be set at naught. In the witch and hobgoblin, other supernatural elements, still of fear, are brought in—caverns, slime and ooze, vermin, corpses, and the like. A human corpse seems normally to produce an instinctive dread which is no doubt somewhat due to its mysteriousness, and which familiarity rapidly dispels."

The fear of the unknown, of the unfamiliar, of the mysterious is quite common with children, with savages, and barbaric tribes. The fear of coming unknown, unfamiliar evil is specially a source of anxiety to the young or untrained, uncultivated minds.

All taboos of primitive societies, of savages, of barbarians, and also of civilized people take their origin, according to recent anthropological researches, in the

"perils of the soul," or in the fear of impending evil. As the great anthropologist Frazer puts it: "Men are undoubtedly more influenced by what they fear than by what they love."

We know how in the case of the ancient nations omens, whether religious or meteorological, such as storms, thunders, lightnings, comets, and eclipses, were regarded with great terror. Armies used to throw away their arms and run panic-stricken on the occasion of the appearance of a comet or of an eclipse. Even in the civilized times of the Athenian republic there was a terror of eclipses and of other unfamiliar natural phenomena. Thucydides, in his history of the Peloponnesian wars, puts the appearance of comets among national disasters. The fear of coming unknown, unfamiliar evil is especially a source of anxiety to the young or untrained, uncultivated minds. This fear of some unknown evil befalling a person may become a source of great fear and anxiety when developed in early childhood. This fear of strangeness, of unfamiliarity, a feeling of being lost, developed in early childhood, may remain unassociated and thus give rise to a state of vague fear. *Different forms of epilepsy are often associated with the fear instinct.*

In most men the instinct of fear is controlled, regulated, and inhibited from very childhood by education and by the whole organization of civilized, social life. There are cases, however, when the instinct of fear is not moderated by education and civilization, when the instinct of fear is aroused by some particular incidents or by particular objects and states. In such cases, fear becomes associated with definite situations, giving rise to morbid fear and anxiety, resulting in the mental diseases known as psychopathies or recurrent mental states, psychoneuroses and somatopsychoses.

In all such cases we can find the cultivation of the

instinct of fear in early childhood. Superstitions, and especially the early cultivation of religion, with its "fear of the Lord" and of unknown mysterious agencies, are especially potent in the development of the instinct of fear. Even the early cultivation of morality and conscientiousness, with their fears of right and wrong, often causes psychoneurotic states in later life. Religious, social, and moral taboos and superstitions, associated with apprehension of threatening impending evil, based on the fear instinct, form the germs of psychopathic affections.

What we find on examination of the psychogenesis of psychopathic cases is the presence of the fear instinct which becomes associated with some interest of life. The interest may be physical in regard to bodily functions, or the interest may be sexual, social; it may be one of ambition in life, or it may be of a general character, referring to the loss of personality, or even to the loss of mind. The fear instinct may become by cultivation highly specialized and associated with normally indifferent objects, giving rise to the various phobias, such as astrophobia, agoraphobia, claustrophobia, erythrophobia, aichmophobia, and other phobias, according to the objects with which the fear instinct becomes associated. Objects, otherwise indifferent and even pleasant, may by association arouse the fear instinct and give rise to morbid states, like the "conditional reflexes" in Pavloff's animals.

CHAPTER IV

EMBRYONIC PERSONALITY AND PSYCHOPATHIC AFFECTIONS

THERE is another factor which helps to arouse the fear instinct, and thus plays an important role in the causation of psychopathic maladies. This factor is *a narrow, suggestible personal life.* In my work "*The Psychology of Suggestion,*" I proved by a series of experiments that the conditions of suggestibility are: Fixation of attention, monotony, limitation of voluntary movements, limitation of the field of consciousness, inhibition. I have shown that these conditions are favorable to disaggregation of consciousness. I have pointed out that a disaggregation of consciousness with an inhibition of the controlling, waking consciousness is one of the important conditions in the causation of subconscious states with their accompanying abnormal suggestibility. In other words, the inhibition of the personal self, or even the limitation of the personal self, helps the formation of dissociations which constitute the soil of all psychopathic diseases. When the person, therefore, is limited in his interests, is narrow in his range of knowledge, is ignorant and superstitious, and his critical personal self is embryonic and undeveloped, the predisposition to mental disaggregation is pronounced. The fear instinct has full sway in the production of psychopathic states. With the limitation and inhibition of the critical personal self, with the limitation and narrowness of personal life interests, there goes an increase of the sense of the unknown and the mysterious, cultivated by religion and superstition, with the baneful consequence of the

development of the fear instinct,—the cause of psychopathic affections.

In the embryonic personality of the child as well as in the undeveloped or narrowed individuality of the adult the sense of the strange, of the unknown and the mysterious, is especially apt to arouse the fear instinct. In fact, the unfamiliar arouses the fear instinct even in the more highly organized mind. "Any new uncertainty," says Bain, "is especially the cause of terror. We become habituated to a frequent danger, and realize the full force of apprehension only when the evil is previously unknown. Such are the terrors caused by epidemics, the apprehensions from an unexperienced illness, the feeling of a recruit under fire. . . . The mental system in infancy is highly susceptible, not merely to pain, but to shocks and surprises. Any great excitement has a perturbing effect allied to fear. After the child has contracted a familiarity with the persons and things around it, it manifests unequivocal fear on the occurrence of anything very strange. The grasp of an unknown person often gives a fright. This early experience very much resembles the manifestations habitual to the inferior animals." In another place Bain rightly says, "Our position in the world contains the sources of fear. The vast powers of nature dispose of our lives and happiness with irresistible might and awful aspect. Ages had elapsed ere the knowledge of law and uniformity prevailing among those powers was arrived at by the human intellect. The profound ignorance of the primitive man (and, we may add, of the undeveloped, limited, and superstitious adult) was the soil wherein his early conceptions and theories sprang up; and the fear inseparable from ignorance gave them their character. The essence of superstition is expressed by the definition of fear. An altogether exaggerated estimate of things, the ascription

of evil agency to the most harmless objects, and false apprehensions everywhere, are among the attributes of the superstitious man."

Compayré, in speaking of the fear of the child, says, "In his limited experience of evil, by a natural generalization, he suspects danger everywhere, like a sick person whose aching body dreads in advance every motion and every contact. He feels that there is a danger everywhere, behind the things that he cannot understand, because they do not fit in with his experience. The observations collected by Romanes in his interesting studies on the intelligence of animals throw much light on this question; they prove that dogs, for instance, do not fear this or that, except as they are ignorant of the cause. A dog was very much terrified one day when he heard a rumbling like thunder produced by throwing apples on the floor of the garret; he seemed to understand the cause of the noise as soon as he was taken to the garret, and became as quiet and happy as ever. Another dog had a habit of playing with dry bones. One day Romanes attached a fine thread which could hardly be seen, to one of the bones, and while the dog was playing with it, drew it slowly toward him; the dog recoiled in terror from the bone, which seemed to be moving of its own accord. So skittish horses show fright as long as the cause of the noise that frightens them remains unknown and invisible to them. It is the same with the child. When in the presence of all these things around him, of which he has no idea, these sounding objects, these forms, these movements, whose cause he does not divine, he is naturally a prey to vague fears. He is just what we should be if chance should cast us suddenly into an unexplored country before strange objects and strange beings—suspicious, always on the *qui vive*, disposed to see imaginary enemies be-

hind every bush, fearing a new danger at every turn in the road."

Similarly, Sully says, "The timidity of childhood is seen in the readiness with which experience invests objects and places with a fear-exciting aspect, in its tendency to look at all that is unknown as terrifying and in the difficulty of the educator in controlling these tendencies." Sully is right in thinking that intellectual culture tends greatly to reduce the early intensity of fear. "This it does by substituting knowledge for ignorance, and so undermining that vague terror before the unknown to which the child and the superstitious savage are a prey, an effect aided by the growth of will power and the attitude of self-confidence which this brings with it." An uncultivated personality with a limited mental horizon, with a narrow range of interests, a personality sensitive to the moral categorical imperative, a personality trained in the fear of the Lord and mysterious agencies, is a fit subject for obsessions by the fear instinct.

In certain types of functional psychosis and neurosis the patient has an inkling of the fear instinct in his dread of objects, or of states of mind, moral scruples, lack of confidence, blushing, religious or social expectations of some coming misfortune and some mysterious evil, but he is not aware of the fear instinct as developed in him by the events and training of early childhood. *The fears of early childhood are subconscious.* At any rate, the patient does not connect them with his present mental affection. In other types of psychopathic affections the patient is entirely unaware of the whole situation, he is engrossed by the symptoms which he regards as the sum and substance of his trouble; the fear is entirely *subconscious.*

The fear instinct fostered by frights, scares, dread of sickness, by religious instruction with its fear of the

Lord, by moral and religious injunctions and duties with fear of punishment or failure in the moral standard and duties, the enforcement of social injunctions with the consequent dread of failure and degradation, —all go to the cultivation of the fear instinct which in later life becomes manifested as functional psychosis with all its baneful effects. Thus a psychoneurotic in his account writes: "I dwell on my childish acts because of my religious training, because of the superstitions charged with religious and pseudo-moral emotions." The fear of the Lord, especially when cultivated in early childhood, is not only as the Bible has it, "the beginning of (religious) wisdom," but is also the beginning of morbid mental states, the source of psychopathic affections.

As Bacon puts it:

"*Natura enim rerum omnibus viventibus indidit metum ac formidinem, vitæ atque essentiæ suæ conservatricem, ac mala ingruentia vitantem et depellentem. Verumtamen eadem natura modum tenere nescia est, sed timoribus salutaribus semper vanos et inanes admiscet; adeo ut omnia—(si intus conspici darentur) Panicis terroribus plenissima sint, praesertim humana.*"

CHAPTER V

THE FEAR INSTINCT AND PSYCHOPATHIC STATES

THE fear instinct is the soil on which grow luxuriantly the infinite varieties of psychopathic affections. The body, sense, intellect, and will are all profoundly affected by the irresistible sweep of the fear instinct as manifested in the overwhelming feeling of anxiety. The fear instinct and its offspring—anxiety—weaken, dissociate, and paralyze the functions of the body and mind, giving rise to the various symptoms of psychopathic diseases. The fear instinct keeps on gnawing at the very vitals of the psychopathic patient. Even at his best the psychopathic patient is not free from the workings of the fear instinct, from the feeling of anxiety which, as the patients themselves put it, "hangs like a cloud on the margin or fringe of consciousness." From time to time he can hear the distant, threatening rumbling of the fear instinct. Even when the latter is apparently stilled the pangs of anxiety torment the patient like a dull toothache.

Montaigne, the great anatomist of human passions, in writing of fear, says, "I am not so good a naturalist (as they call it) as to discern by what secret springs fear has its motion in us; but be this as it may, it is a strange passion, and such a one as the physicians say there is no other whatever that sooner dethrones our judgment from its proper seat; which is so true, that I myself have seen very many become frantic through fear; and even in those of the best settled temper, it is most certain that it begets a terrible astonishment and confusion during the fit. I omit the vulgar sort, to

whom it one while represents their great-grandsires risen out of their graves in their shrouds, another while hobgoblins, specters, and chimeras; but even among soldiers, a sort of men over whom, of all others, it ought to have the least power, how often has it converted flocks of sheep into armed squadrons, reeds and bull-rushes into pikes and lances, and friends into enemies . . . . *adeo pavor etiam auxilia formidat.* . . . The thing in the world I am most afraid of is fear, that passion alone, in the trouble of it, exceeding all other accidents. . . . . *Tum pavor sapientiam omnem mihi ex animo expectorat.* Such as have been well banged in some skirmish, may yet, all wounded and bloody as they are, be brought on again the next day to the charge; but such as have once conceived a good sound fear of the enemy will never be made so much as to look the enemy in the face. Such as are in immediate fear of losing their estates, of banishment or of slavery, live in perpetual anguish, and lose all appetite and repose; whereas such as are actually poor, slaves or exiles, ofttimes live as merrily as other folks. And the many people who, impatient of perpetual alarms of fear, have hanged or drowned themselves, or dashed themselves to pieces, give us sufficiently to understand that fear is more importunate and insupportable than death itself."

In the present fearful war of European nations against the pressure of invasion by Teutons and their allies, a war unparalleled in the history of humanity for its extensive, brutal destructiveness, a war in which all the inventions of ages are made subservient to the passions of greed, hatred, and ferocity, having one purpose, the extermination of man, a war surpassing all battles ever waged by man or beast, in such a calamitous clash and slaughter of nations, the fear instinct comes to the foreground, claiming its victims, working

havoc among the frenzied, struggling armed masses and terrified, stricken populations.

That fear is a fundamentally important element in neuroses and psychoses has been fully acknowledged by many a neurologist and psychiatrist. Thus, Oppenheim says, "Fear is a common symptom in the neuroses. It may be an indefinite feeling of anxiety not awakened by any particular cause, or it may be definite concepts and external influences which call the fear into action. The sensation is variously described. It has its seat, as a rule, in the cardiac region, at other times in the head. The patient feels as if his heart were standing still; he thinks that he must fall or that he will get a stroke. Some explain the condition thus: 'It seems to me that I have done something wrong, as if something terrible is going to happen.' The expression of the face reveals a condition of anxiety, the fear often producing vasomotor, secretory, and motor disturbances; the face reddens or becomes pallid, perspiration breaks out, the saliva ceases to flow, the lips and tongue become dry, the pulse and respiration become accelerated."

"A materially different picture," says Kirchoff, "is presented when the feeling of fear enters the symptom group (of melancholia). This feeling is referred to the cardiac region (precordial fear), and is one of the most important and frequent accompaniments of severe melancholia. The external quiet of severe simple melancholia becomes converted into anxious restlessness. From the start sleep is almost always disturbed because the patient is tormented by the pressure in the cardiac region. Other disagreeable sensations soon follow, such as constriction of the neck or a dull feeling in the head; bad dreams and anxious thoughts become more numerous. The daily work may make the condition endurable during the day for a time, but in the

stillness of the night it is rapidly intensified, and if sleep does not refresh the excited brain, the days likewise are filled more and more with disheartening fears. The implication of the organs of the body is much more distinct in anxious than in simple melancholia. The appetite is lost, the nutrition is rapidly impaired. Respiration is superficial, the heart's action is accelerated and often irregular, the pulse is small, the skin is cool. When the terror shows variations or occurs in paroxysms, its increase is shown by suppression of the urine and perspiration, its subsidence by increase in these secretions. The more chronic the precordial fear the more indistinct do these symptoms become. . . . . Religious notions are often awakened and are then explained as the dread of being possessed by evil spirits. . . . In more severe cases the internal life becomes a real dreamy condition in which external expressions are received in a confused, shadowy and inimical manner. A terrible, baseless, but paralyzing fear takes possession of consciousness." The anxiety states of neurosis and psychosis are essentially due to the awakening of the fear instinct normally present in every living being. The fear instinct is a fundamental one; it is only inhibited by the whole course of civilization and by the training and education of social life. Like the jinn of the "Arabian Nights," it slumbers in the breast of every normal individual, and comes fully to life in the various neuroses and psychoses.

Kraepelin and his school lay, with right, special stress on the fact that "Fear is by far the most important persistent emotion in morbid conditions. . . . . Fear is manifested by anxious excitement and by anxious tension." "Experience," says Kraepelin, "shows an intimate relationship between insistent psychosis and the so-called 'phobias,' the *anxiety states* which in such patients become associated with definite impres-

sions, actions, and views." They are associated with the thought of some great unknown danger, although the patient may be aware that in reality nothing of the kind will befall him. Violent heart action, pallor, a feeling of anxiety, tremor, cold sweat, meteorismus, diarrhea, polyuria, weakness in the legs, attacks of fainting, so that the patient loses control of his limbs and occasionally simply collapses. "These states," says Kraepelin, with his usual insight into abnormal mental life, "remind one of the feeling of anxiety which in the case of healthy people may in view of a painful situation or of a serious danger deprive one of the calmness of judgment and confidence in his movements." Thus, we find from different standpoints that the feeling of anxiety with all its accompanying phenomena is one of the manifestations of the most fundamental, the most potent, of animal instincts, the fear instinct which is at the basis of all psychopathic maladies.

The fear instinct, as the most subtle and most fundamental of all instincts, is well described by Kipling:—

"Very softly down the glade runs a waiting, watching shade,
And the whisper spreads and widens far and near;
And the sweat is on thy brow, for he passes even now—
He is Fear, O Little Hunter, he is Fear!

"Ere the moon has climbed the mountain, ere the rocks are ribbed with light,
When the downward dipping trails are dank and drear,
Comes a breathing hard behind thee—*snuffle*—*snuffle* through the night;
It is Fear, O Little Hunter, it is Fear!

"On thy knees and draw the bow; bid the shrilling arrow go:
In the empty, mocking thicket plunge the spear;
But thy hands are loosed and weak, and the blood has left thy cheek—
It is Fear, O Little Hunter, it is Fear!

"When the heat-cloud sucks the tempest, when the slivered pine trees fall,
When the blinding, blaring rain-squalls lash and veer;
Through the war gongs of the thunder rings a voice more loud than all—
It is Fear, O Little Hunter, it is Fear!

"Now the spates are banked and deep; now the footless boulders leap—
Now the lightning shows each littlest leaf-rib clear.
But thy throat is shut and dried, and thy heart against thy side
Hammers: Fear, O Little Hunter,—This is Fear!"

A well known author, a psychopathic sufferer, writes:

"Carlyle laid his finger upon the truth, when he said that the reason why the pictures of the past were always so golden in tone, so delicate in outline, was because the quality of fear was taken from them. It is the fear of what may be and what must be that overshadows present happiness; and if fear is taken from us we are happy. The strange thing is that we cannot learn not to be afraid, even though all the darkest and saddest of our experiences have left us unscathed; and if we could but find a reason for the mingling of fear with our lives, we should have gone far towards solving the riddle of the world."

Dr. Crile lays special stress on the pathological aspect of the fear instinct:

"That the brain is definitely influenced—damaged even—by fear has been proved by the following experiments: Rabbits were frightened by a dog but were neither injured nor chased. After various periods of time the animals were killed and their brain-cells compared with the brain-cells of normal animals—widespread changes were seen. The principal clinical phenomena expressed by the rabbit were rapid heart, accelerated respiration, prostration, tremors, and a

rise in temperature. The dog showed similar phenomena, excepting that, instead of such muscular relaxation as was shown by the rabbit, it exhibited aggressive muscular action. Both the dog and the rabbit were exhausted but, although the dog exerted himself actively and the rabbit remained physically passive, the rabbit was much more exhausted.

"Further observations were made upon the brain of a fox which had been chased for two hours by members of a hunt club, and had been finally overtaken by the hounds and killed. Most of the brain-cells of the fox, as compared with those of a normal fox, showed extensive physical changes.

"The next line of evidence is offered with some reservation, but it has seemed to me to be more than mere idle speculation. It relates to the phenomena of one of the most interesting diseases in the entire category of human ailments—I refer to exophthalmic goiter, or Graves' disease, a disease primarily involving the emotions. This disease is frequently the direct sequence of severe mental shock or of a long and intensely worrying strain. The following case is typical: A broker was in his usual health up to the panic of 1907; during this panic his fortune and that of others were for almost a year in jeopardy, failure finally occurring. During this heavy strain he became increasingly nervous and by imperceptible degrees there developed a pulsating enlargement of the thyroid gland, an increased prominence of the eyes, marked increase in perspiration—profuse sweating even—palpitation of the heart, increased respiration with frequent sighing, increase in blood-pressure; there were tremor of many muscles, rapid loss of weight and strength, frequent gastro-intestinal disturbances, loss of normal control of his emotions, and marked impairment of his mental faculties. He was as completely

broken in health as in fortune. These phenomena resembled closely those of fear and followed in the wake of a strain which was due to fear."

Animals in which the fear instinct can be aroused to a high degree become paralyzed and perish. Under such conditions the fear instinct not only ceases to be of protective value, but is the very one that brings about the destruction of the animal obsessed by it. "One of the most terrible effects of fear," says Mosso, "is the paralysis which allows neither of escape nor of defense." The fear instinct is no doubt one of the most vital of animal instincts, but when it rises to a high degree of intensity, or when it is associated with familiar and useful objects instead of strange and harmless objects, then we may agree with the great physiologist, Haller, that the phenomena of fear are not aimed at the preservation, but at the destruction of the animal, or as Darwin puts it, are of "disservice to the animal." This is just the condition found in psychopathic diseases. The fear instinct becomes aroused in early life and cultivated by training, education, and environment, becoming associated in later life with particular events, objects, and special states.

When the instinct of fear is aroused in connection with some future impending misfortune, the feeling of expectation and all its psychological changes, muscular, respiratory, cardiac, epigastric, and intestinal, go to form that complex state of anxiety and anguish, so highly characteristic of acute varieties of psychopathic disease. When fear reaches its acme, the heart is specially affected, the circulatory and respiratory changes become prominent, and give rise to oppression and depression which weigh like an incubus on the patient—the feeling known as "precordial anxiety."

The fear instinct is the ultimate cause of the infinite varieties of psychopathic diseases.

Stanley Hall seems to accept this view of the subject. In his recent paper on *Fear*, he writes: "If there be a vital principle, fear must be one of its close allies as one of the chief springs of the mind. . . " In spite of his former "psychoanalytic" inclinations, Professor Hall now asserts that "Freud is wrong in interpreting this most generic form of fear as rooted in sex. . . Sex anxieties are themselves rooted in the larger fundamental impulse of preservation of life with its concomitant instinct of fear." This is the etiology on which I laid stress in my papers and works on the subject of psychopathic diseases. So deeply convinced is Professor Stanley Hall of the primitive and fundamental character of the fear instinct, that he refers to the facts that "if the cerebrum is removed, animals, as Goltz and Bechterev have proved, manifest very intense symptoms of fear, and so do human monsters born without brains, or hemicephalic children, as Sternberg and Lotzko have demonstrated."

Oppenheim, Kirchoff, Kraepelin, and recently other psychologists and neurologists of note all concur that fear is a fundamental factor in the pathology of neurosis. As physicians, we must remember the importance of fear in cases of surgical shock.

So potent, all embracing, and all pervading is the fear instinct, that the physician must reckon with it in his private office, in the hospital, and in the surgical operating room.

"The acute fear of a surgical operation" Crile writes, "may be banished by the use of certain drugs that depress the associational power of the brain and so minimise the effect of the preparations that usually inspire fear. If, in addition, the entire field of operation is blocked by local anesthesia so that the associa-

tional centers are not awakened, the patient will pass through the operation unscathed."

In a number of my cases psychognosis clearly reveals the fact that even where the neurosis has not originated in a surgical trauma, surgical operations reinforced, developed, and fixed psychopathic conditions.

The fear instinct arises from the impulse of self-preservation without which animal life cannot exist. The fear instinct is one of the most primitive and most fundamental of all instincts. Neither hunger, nor sex, nor maternal instinct, nor social instinct can compare with the potency of the fear instinct, rooted as it is in self preservation,—the condition of life primodial. When the instinct of fear is at its height, it sweeps before it all other instincts. Nothing can withstand a panic. Functional psychosis in its full development is essentially a panic. A psychogenetic examination of every case of functional psychosis brings one invariably to the fundamental fear instinct. Fear is the guardian instinct of life. The intensity of the struggle for existence, the preservation of life of the animal, is expressed in the instinct of fear. The fear instinct in its mild form, when connected with what is strange and unfamiliar, or with what is really dangerous to the animal, is of the utmost consequence to life.

What is strange and unfamiliar may be a menace to life, and it is a protection, if under such conditions the fear instinct is aroused. It is again of the utmost importance in weak animals, to have the fear instinct easily aroused by the slightest strange stimulus; the animal is defenseless, and its refuge, its safety, is in running. The unfamiliar stimulus may be a signal of danger, and it is safer to get away from it; the animal cannot take chances. On the other hand, animals that are too timid, so that even the familiar becomes too suspicious, cannot get their food and cannot leave

progeny,—they become eliminated by the process of natural selection. Even in weak animals an intensified state of the fear instinct becomes biologically abnormal, pathological.

The fear instinct is abnormally developed in psychopathic disturbances. Harmful stimuli or expectation of danger to themselves, to their family, or to friends may arouse the feelings of anguish, anxiety, worry, manifestations of the fear instinct. Objects, thoughts, stimuli, situations, and events of expected danger may keep on changing, persisting for a longer or shorter time, but the underlying pathological state of the fear instinct remains, easily fusing with experiences of possible danger to all included within the circle of the patient's self-regard.

Events or situations with fixed sensory stimuli, when repeated, *fix* the neurosis, very much in the same way as are the "conditional reflexes" in Pavloff's experiments. Other sets of stimuli of an ideational character are transient in duration, while the general, apprehensive, subconscious condition persists unchanging to seize again and again on ever new objects and thoughts, forming psychic compounds of various degrees of stability.

CHAPTER VI

MANIFESTATIONS OF FEAR INSTINCT AND SYMPTOMS OF PSYCHOPATHIC DISEASES

IF we examine closely the symptoms of fear, we invariably find the symptoms of functional psychosis. Fear affects the muscular and sensory systems, the vasomotor system, the respiratory system, the sudorific glands, the viscera, the heart, the intestines, etc. Bain, in describing the emotions of fear or terror, says "The appearances may be distributed. Terror on the physical side shows both a loss and a transfer of nervous energy. The appearances may be distributed between the effects of relaxation and effects of tension. The relaxation is seen, as regards the muscles, in the dropping of the jaw, in the collapse overtaking all organs not specially excited, in trembling of the lips and other parts, and in the loosening of the sphincters. Next, as regards the organic processes and viscera. The digestion is everywhere weakened; the flow of saliva is checked, the gastric secretion arrested (appetite failing), the bowels deranged; the expiration is enfeebled. The heart and circulation are disturbed; there is either a flushing of the face or a deadly pallor. The skin shows symptoms—the cold sweat, the altered odor of the perspiration, the creeping action that lifts the hair. The kidneys are directly or indirectly affected. The sexual organs feel the depressing influence. The secretion of milk in the mother's breast is vitiated."

Darwin gives the following description of fear:—"The frightened man at first stands like a statue motionless and breathless, or crouches down as if to escape observation. The heart beats quickly and violently; but it is very doubtful if it then works more

efficiently than usual so as to send a greater supply of blood to the body; for the skin instantly becomes pale, as during incipient faintness. The paleness of the surface, however, is probably in large part or is exclusively due to the vasomotor center being affected in such a manner as to cause the contraction of the small arteries of the skin. That the skin is much affected under the sense of great fear we see in the marvelous manner in which the perspiration immediately exudes from it. This exudation is all the more remarkable as the surface is then cold, and hence the term, a cold sweat; whereas the sudorific glands are properly excited into action when the surface is heated. The hairs also on the skin stand erect, and the superficial muscles shiver. In connection with the disturbed action of the heart the breathing is hurried. The salivary glands act imperfectly; the mouth becomes dry and is often opened and shut. I have also noticed that under slight fear there is a slight tendency to yawn. One of the best symptoms is the trembling of all the muscles of the body. From this cause and from the dryness of the mouth, the voice becomes husky or indistinct, or may altogether fail."

If we turn now to the manifestations of psychopathic maladies, we meet with the same symptoms:—

(*a*) The attacks may be muscular, involving symptoms such as trembling, shaking, paresis, paralysis, or rigidity; there may be affection of locomotion or of muscular co-ordination.

(*b*) There may be sensory disturbances,—anaesthesia, paraesthesia, analgesia, or hyperalgesia, as well as affection of muscular sense and kinaesthesis.

(*c*) There may be skin disturbances, such as arrest of perspiration or profuse perspiration, especially under the influence of emotions, worry, and fatigue; such perspiration may also occur at night, and in some cases the fear of tuberculosis may be associated with such conditions.

(*d*) The lungs may become affected functionally, and there may occur respiratory disturbances; coughing, hawking, apnea, dyspnea, and asthmatic troubles may result.

(*e*) The heart becomes affected, bringing about precordial pain; palpitation of the heart, bradycardia, tachycardia, and cardiac arrhythmia may result.

(*f*) The stomach and intestines become affected; indigestion, vague fugitive soreness and pain may be experienced all over or in special regions of the abdomen; constipation or diarrhea may ensue.

(*g*) The renal apparatus may become affected and its activity arrested, or, as is more often the case in the milder forms of psychopathic troubles, there may be present an alteration in the amount or frequency of micturition, such as is found in the conditions of anuria and polyuria.

(*h*) Menstruation becomes disturbed, and we may meet with conditions of dysmenorrhea, amenorrhea, menorrhagia, and other disturbances of the tubes, ovaries, and uterus.

(*i*) There are disturbances of the nervous system, such as headache, and a general dull sensation of fatigue and paresis of all mental functions, with dizziness and vertigo.

On the mental side we find in the psychopathies the following disturbances:—

(*a*) Affections of perceptual activity,—illusions and hallucinations.

(*b*) Affections of intellectual activity,—argumentativeness in regard to insignificant things, metaphysical and theological disputations.

(*c*) Affections of the moral sense,—scrupulousness, overconscientiousness, not living up to ideal states.

(*d*) Affections of religious life,—commission of sins and fear of punishment.

(*e*) Affections of social life,—timidity, blushing, etc.

(*f*) Affections in regard to objects, such as astrophobia, acmephobia, agoraphobia, claustrophobia, etc.

(*g*) Affections of conceptual life,—insistent ideas.

(*h*) Affections of the attention,—aprosexia.

(*i*) Affections of the will,—states of aboulia and uncontrollable impulses.

(*j*) Affections of the memory,—amnesic and paramnesic states.

(*k*) General mental fatigue.

(*l*) Affections of sexual life,—perversion and inversion.

(*m*) Affections in regard to marital relations.

(*n*) Affections in regard to personal life,—diffidence, self-condemnation, self-depreciation.

(*o*) Affections of apparent loss of personality,—feeling of self gone.

(*p*) Formation of new personalities,—dual and multiple personality.

In connection with all such psychoneurotic affections we find invariably present a feeling of unrest, of uneasiness, a feeling of anxiety, *conscious or subconscious*, an anxious feeling of some impending evil. In all such affections we find the brooding spirit of the most powerful of all animal instincts,—the fear instinct.

All those affections in psychopathic cases are manifestations of fear. They are the symptoms of the fear instinct. Fear, with its consequent feeling of anxiety of some impending evil is the cause of all the symptoms of functional psychosis in general and of somopsychosis in particular. Remove the fear and the symptoms will disappear.

The fear instinct, revealed by examination of psychogenesis in the case of somopsychosis, becomes still more evident in the case of psychoneurosis. In psychoneurosis the fear protrudes into the upper consciousness. The patient clearly indicates his fears in his account, and one has to be misled with abstruse theoretical

considerations not to notice clearly that the whole matter is one of the fear instinct. The patient lays stress on his state of fear by every gesture, attitude, speech, and by his account of his trouble. He comes to the physician with some kind of fear of something, and finally shows fear in general, and asks the physician to assure him that his mind is not giving way, as he is mortally afraid of insanity. Some of the psychoneurotics work themselves up into such a state of excitement that they make arrangements with their relatives and friends to take care of them and stand by them when their mind will succumb. The whole state is one of fear, of intense fear, of frenzy and panic.

Functional psychosis, both somopsychosis and psychoneurosis, can be reduced to one source,—the fear instinct. The anxiety present in the various forms of psychopathic maladies is the pang of dissolution, the foreshadowing of death-agonies, the agonising fear of dissolution such as is present in cases of angina pectoris. In fact, the fear-paroxysm of functional psychosis is even worse than the death-agony itself. Anxiety is conscious or subconscious fear of pain and suffering, vague as to extent and intensity. In anxiety there is an element of uncertainty. Fears which have their roots deep down in the subconscious are, therefore, specially apt to become feelings of anxiety. Neither inattention, nor disappointments, nor fatigue, physical or mental, nor exhaustion of disease, nor suppression of wishes and desires, nor suppressed and unsatisfied sexual life, nor conflicts, nor shocks of themselves, can ever give rise to psychopathic states. It is only in so far as they become associated with the fear instinct that psychopathic states can arise. The fear instinct is the sole cause of psychopathic affections.

It may be well to point out here that in neuropsychosis the fear is conscious, or, at any rate, sufficiently clear for the physician to find it out and reveal it to

the patient, while in somopsychosis the fear is entirely submerged and subconscious, the somatic symptoms alone constituting the patient's conscious complaint. In psychoneurosis the patient has an inkling of fear in his dread of objects, states of mind, moral scruples, lack of confidence, blushing, religious or social expectations, of some coming misfortune and some mysterious evil, but he is not aware of the fear instinct developed in him by the events and training of early childhood. The fears of early childhood are all subconscious. At any rate, the patient does not connect them with his present mental affection. In somopsychosis the patient is entirely innocent of the whole situation, he is entirely engrossed by the somatic symptoms which he regards as the sum and substance of his trouble, the fear is entirely subconscious.

The fear instinct fostered by frights, scares, dread of sickness, by religious instruction with its fear of the Lord, moral and religious injunctions, with fear of punishment for failure in the moral standard and duties, the enforcement of social taboos with the consequent dread of failure and degradation, all go to the cultivation of the fear instinct which in later life becomes manifested as somopsychosis or psychoneurosis. All functional psychosis, whether somopsychosis or psychoneurosis, is nothing else but an obsession of the fear instinct, conscious and subconscious.

The deleterious influence of fear-instinct on the nervous system is well stated by Dr. Crile:

"It has been shown that the various cases of the discharge of nervous energy produce alterations in the nervous system and probably in the thyroid gland. This is especially true of the fear stimulus, and has been clearly demonstrated in the brains of rabbits which had been subjected to fear alone. Of special interest was the effect of daily fright. In this case the brain-cells showed a distinct change, although the

animal had been subjected to no fear for twenty-four hours before it was killed. Now, a great distinction between man and the lower animals is the greater control man has acquired over his actions. This quality of control, having been phylogenetically most recently acquired, is the most vulnerable to various *nocuous* influences. The result of a constant noci-integration may be a wearing-out of the control cells of the brain. In a typical case of Graves' disease a marked morphologic change in the brain-cells has been demonstrated. As has been previously stated, the origin of many cases of Graves' disease is associated with some noci-influence. If this influence causes stimulation of both the brain and the thyroid, its excessive action may cause impairment of the brain and also hyperplasia of the thyroid. As self-control is impaired, fear obtains an ascendency, and, *pari passu*, stimulates the thyroid gland still more actively. Finally, the fear of the disease itself becomes a noci-stimulus. As the thyroid secretion causes an increase in the facility with which nervous energy is discharged, a pathologic reciprocal interaction is established between the brain and the thyroid. The effect of the constantly recurring stimulus of the noci-influence is heightened by summation. This reciprocal goading may continue until either the brain or the thyroid is destroyed. If the original noci-stimulus is withdrawn before the fear of the disease becomes too strong, and before too much injury to the brain and thyroid has been inflicted, a spontaneous cure may result. Recovery may be greatly facilitated by complete therapeutic rest. A cure implies the return of the brain-cells to their normal state, with the re-establishment of the normal self-control and the restoration of the thyroid to its normal state, when the impulses of daily life will once more have possession of the final common path and the noci-influence will be dispossessed. The

discovery of the real cause of a given case of Graves' disease is frequently difficult because it may be of a painful personal nature. Of extreme interest is the fact that, in the acute stage, the patient may be unable to refer to the exciting cause without exhibiting an exacerbation of the symptoms of the disease. I presume no case should be regarded as cured until reference can be made to its cause without an abnormal reaction. It has been established that in Graves' disease injury to any part of the body, even under inhalation anesthesia, causes an exacerbation of the disease. Fear alone may cause an acute exacerbation. These acute exacerbations are frequently designated 'hyperthyroidism,' and are the special hazard of operation.

"In applying the principle of anoci-association in operations on patients with Graves' disease there is scarcely a change in the pulse, in the respiration, or in the nervous state at the close of the operation. I know no remedy which can obviate the effect of the inflowing stimuli from the wound after the cocain has worn off. It is necessary, therefore, not to venture too far in serious cases. Since the adoption of this new method (anoci-association) my operative results have been so vastly improved that now I rarely regard any case of Graves' disease as inoperable, at least to the extent of contraindicating a double ligation:

"Average 5 P. M. pulse-rate of ten patients during the first four days after operation:

Ether	119
Nitrous Oxide	112
Anoci	103"

"Thus we can understand the variations in the gastric analyses in a timid patient alarmed over his condition and afraid of the hospital. He is integrated by fear and as fear takes precedence over all other impulses, no organ functionates normally. For the same reason, one sees animals in captivity pine away under the dominance of fear."

Neurosis may be represented as a *fixed* ideosensory nucleus, surrounded by a more or less *variable* network of associations the stability of which increases with the recession from the nucleus to the periphery or marginal fringe of consciousness.

Fear of strangeness, of unfamiliarity, developed in early childhood, may remain unassociated and thus give rise to a state of vague fear. The instinct, however, may through experience, through some trauma, find for itself an object and become associated with it. "Anxiety, fear, horror," says Mosso, "will twine themselves perpetually around the memory, like deadly ivy choking the light of reason." It is the fear instinct, the fundamental instinct of self-preservation, that gives rise to all forms of recurrent mental states, with all their agony, anxiety, despair, and depression. The fear instinct is at the basis of psychopathic diseases. All the symptoms in their infinite variety are so many different manifestations of the one fundamental fear instinct.

The inner conflict and introspection characteristic of psychopathic troubles, are pathological, solely because of their association with the fear instinct. Mental conflict and introspection never give rise to a mental malady; they are rather favorable to a speculative mind. When, however, introspection and mental conflict are associated with the fear instinct, the result is a psychopathic malady. In the same way a physical sickness in itself, or the thought of suffering, physical or mental, does not give rise to a psychopathic affection. It is only when the sickness, or the thought of disease, becomes associated with the fear instinct, only then does a psychopathic malady arise. The source of psychopathic affections is the fear instinct, a development of which in early childhood predisposes to all forms of psychopathic states.

Functional psychosis or neurosis is an obsession of the fear instinct, conscious and subconscious. Thus

one of my patients became obsessed with fear of tuberculosis, manifesting most of the symptoms of "consumption" after a visit of a tuberculous friend. Another patient became possessed with the fear of death after visiting a sick relative of his in one of the city hospitals. Another became obsessed with the fear of syphilis after having been in contact with a friend who had been under antiluetic treatment. In all these psychopathic fears there was a long history of a well developed subconscious fear instinct, often traced to experiences of early childhood. Take away the fear and the psychosis or neurosis disappears.

As we have pointed out, according to the investigations of Pavloff, Vasiliev, Babkin, Savadsky, Mishtovt, Orbeli, Sherrington, and others, ideosensory changes initiated in the central nervous system and especially emotional disturbances, bring about extensive motor and circulatory reactions, accompanied by glandular secretions. Recently Schultze has found that glycosuria accompanies fear psychosis, and that the amount of glycosuria present varies with the degree and intensity of depression and fear, reaching its highest amount with the maximum of the fear psychosis. The clinical studies of Raimann, Arndt, and also my own go to confirm the same interrelation. The experiments of Cannon, Shohl, Wright, and de la Paz carried out on animals prove the intimate relation of emotion, and more especially of fear-anger emotions, and stimulation of adrenal secretion; the increased secretion of epinephrine gives rise to glycosuria. The extensive motor reactions, the circulatory disturbances, and especially the stimulations of glandular secretions and their consequent effects on the total systemic reactions of the organism under the influence of the fear instinct form a psychophysiological foundation for the psychopathology of functional psychosis or neurosis.

CHAPTER VII

THE MAIN PRINCIPLES OF PSYCHOPATHIC DISEASES

I have formulated the following fundamental principles of psychopathic diseases:

I. *The Principle of Embryonic Psychogenesis.* Psychopathic maladies, like sarcomatous and carcinomatous growths, are of an embryonic type, having their genesis in the psychic stroma of early childhood. The genesis of psychopathic diseases can be traced to a pathological germ focus, to a phobo-experience as germinal nucleus round which the fear instinct becomes organized. This pathological focus keeps up the fermentation, development, and growth of the slowly forming psychopathic symptom complex. Psychopathic states are primarily embryonic. The pathogenic germs of the primitive fear instinct are planted in the embryonic mental tissues of early child life. The psychogenesis of neurosis is an embryonic fear instinct.

II. *The Principle of Recurrence*[1]. In the simple life of the child, under the influence of slowly changing environment, the psychopathological system of the aroused fear instinct, formed in early childhood, tends to *recur*, both in the waking and sleeping states, especially in the intermediate hypnoidal states to which the child is subject, as demonstrated by my observations and experiments.

III. *The Principle of Proliferation and Complication.* With the gradual change of the environment and with

[1]The principle of Recurrence is fundamental in Psychology and Psychopathology. Recurrence is a form of reproduction of various types of moments. See *The Foundations*, Part II.

the growth of the child, each recurrence of the fear system tends to an increased *proliferation* of fear associations. There is a tendency to formation of a complex psychopathic system which grows more complicated with the proliferation of conscious and subconscious associations, and with the ever increasing assimilation of new masses of fear and anxiety experiences, *further induced and kept up by worries of a depressing and unfavorable environment.* The pathological focus with its organizing fear instinct as substratum brings about an ever greater proliferation and complication with the growing assimilation of psychic contents, forming the psychopathic matrix of the symptom complex.

IV. *The Principle of Fusion or of Synthesis.* The newly assimilated psychic contents, entering into the slowly forming complex fear system, are at first in a state of confused, incoherent disaggregation and disorganization. With the repetition of the processes of recurrence, proliferation, and complication, the psychic contents become firmly associated, synthesized, and organized into an integral psychic compound with the fear instinct as the main, inner, controlling focus. The psychic contents become *fused*, *synthesized* into one complex network of fear obsessions.

V. *The Principle of Contrast.* Feelings and emotions follow the law of alternation by association of contrast. After an intense, prolonged, and exhausting activity of a complex system with one set of feelings and reactions, another system with a contrasting set of emotions and reactions is brought into function. Thus excitement and passion of emotional pleasure-tone may pass into its opposite of contrasting, disagreeable, painful feeling. Feelings of excitement, passion, and exhilaration may be followed by disgust, nausea, and even vomiting. Such emotional alternation is by some medical men ascribed to fanciful, speculative, anatom-

ical and embryological connections. The principle is essentially central in nature. The particular form of its expression is a matter of central associations formed by experience. *The fear instinct becomes attached to the opposed contrast emotions of self-regard, such as love and desire. Fear, though positive and primary, assumes a negative and secondary aspect as non-fulfillment of desire or fear of loss of the object of love.*

Psychomotor reactions with *contrast feeling tone* may be formed by means of voluntary association for the *relief* or rather for the *inhibition* of too great tension of unpleasant overexcitement. The law of contrast is characteristic of the mental life of primitive man and of the undeveloped consciousness of the child, as well as of the degenerative, atavistic states of psychopathic diseases. Psychopathic fear compounds with feelings of depression alternate with systems, having as their feeling-tone states of mental exhilaration. This condition gives rise to that mental alternation so typical of psychopathic diseases, closely simulating manic-depressive psychoses.

VI. *The Principle of Recession.* Child experiences tend to lapse from conscious memory. This tendency is further reinforced by the process of recession, developed in detail in my works. Cognitive states recede from the focus to the periphery of consciousness, but emotional fear reactions to *particular, conditional* stimuli keep on recurring reflexly, automatically. The receding mental states become marginal and subconscious. Such states, to use a Mendelian term, are *recessive.* Recessive states recede and fade away from consciousness with each recurrence or reproduction of the symptom complex.

VII. *The Principle of Dissociation.* Recessive elements and states, becoming marginal and submerged subconsciously, lapse from voluntary control and from

recall of conscious memory; they fall outside the dominant conscious life of the individual. The lapsed states are present subconsciously, and can be reproduced in various subconscious conditions, such as hypnotic, hypnoid, hypnoidal, and hypnoidic, a description of which I give in *The Symptomatology.* Recessive elements and states fall outside the domain of voluntary associations, and as such, they are regarded as *dissociated* from the patient's personal life activity. Dissociated systems become parasitic, and, like malignant growths, suck the life energy of the affected individual. Under unfavorable conditions and appropriate stimulations these dissociated, parasitic, recessive systems become manifested in later life, giving rise to fully developed symptom complexes of psychopathic states.

VIII. *The Principle of Irradiation or of Diffusion.* The various factors of recurrence, complication, fusion, contrast, recession, and dissociation tend to neutralization of various characters of life experiences, entering into synthesis of the pathological complex system. The fear emotion becomes devoid of much, if not of all, of the cognitive content of experience. During this stage of the growth of the psychopathic symptom complex the affected individual may for a time appear normal. The pathological condition, however, is subconsciously dormant. Meanwhile, the fear instinct, acting like a fermenting enzyme, keeps on affecting more and more psychic material. Like a malignant tumor, growing by infiltration, the latent, subconscious fear instinct becomes gradually infiltrated, diffused, irradiated throughout the psychic life of the individual, finally giving rise to a general diffused state of apprehension, anxiety, and anguish.

IX. *The Principle of Differentiation.* With the growth of the child's personal life and with the further

development of cognitive activity the general diffused emotion of the fear instinct with its feeling of anxiety and anguish, either through a series of traumas or through the intensity of a shock, becomes associated with some special object or event in the patient's *present life experience*, forming the apparent nucleus of the neurosis, constituting *the ultimate fear state*. This apparently central nucleus could not possibly of itself evoke all the extensity and intensity of the fear reactions of the psychopathic states, were it not for the great mass of fear systems which lend the last trauma its overwhelming force. The last trauma, however, is but the exciting cause, simply revealing the latent psychosis or neurosis which becomes differentiated along definite lines of mental life.

X. *The Principle of Dominance.* Ultimate fear states persist in consciousness, becoming amplified and intensified with the unfolding of mental life. Such mental states, normal and abnormal, to use another Mendelian term, are *dominant.* In many cases, *under unfavorable conditions of life and education*, the fear experiences of early childhood become reinforced by a series of further traumas, which help the formation and keep up the recurrence of ultimate fear states. The fear instinct, like a malignant growth, expands along lines of least resistance. The dominant systems persist throughout the vicissitudes of life, giving rise to a fully developed somatopsychosis or psychoneurosis.

XI. *The Principle of Dynamogenesis.* This factor is important in the domain of psychopathology and psychotherapy. It is intimately related to the more general and more fundamental principle of reserve energy, developed independently by Professor James and by myself. A dissociated system of recessive elements, latent and inactive, gathers force, manifesting itself in subconscious eruptions, convulsing the patient's

general life activity. Subconscious systems of recessive states, when called into function, respond to appropriate stimulations with intense psychomotor reactions. The mass of associated systems exercises control on each one of its constituent systems. When a system is dissociated, the control is removed,—it is like a mechanism without its controlling, governing gear, manifesting all its latent energy, giving rise to increased *dynamogenesis*. The emotion of the fear instinct becomes abnormally intense and uncontrollable.

XII. *The Principle of Inhibition.* According to the principle of irradiation and fusion, the fear instinct tends to spread and gets diffused throughout the patient's personality. The fear instinct keeps on oscillating, spreading, changing with age, education, sex, and fluctuations of personal interests, spreading to states farther and farther removed from the original pathological focus with which, however, the states remain firmly associated. The neurosis may thus pass through many stages of metamorphosis with new determinations, but the fear nucleus remains ever the same, gathering more and more energy with each transforming interest. When the fear instinct becomes intense and diffused, it begins to exercise an inhibitive influence on nervous and mental functions. This inhibition by the hypertrophied fear instinct is specially strong on all those functions and systems that enter into the synthesis of the psychopathic aggregate.

XIII. *The Principle of Diminishing Resistance.* In proportion as the psychopathic condition with its symptom complex keeps on recurring, the pathological system formed, is gaining not only in energy, but also in *ease* of manifestation. The psychopathic state is evoked at the least occasion. The psychopathological symptom complex emerges at an *ever diminishing* intensity of stimulation. The influence, the control,

the resistance of associative systems, constituting the individuality of the patient, is more and more weakened. The *resistance* of healthy, normal associations is ever diminishing, until a point is reached when all power of opposition and control is lost. The psychopathological system with its symptom complex gets complete sway over the patient's life, and becomes an *uncontrollable, psychopathic obsession.*

XIV. *The Principle of Metathesis and Control by Modification.* In the psychognosis of psychopathic cases I find that in controlling the attack the patient may have recourse to a procedure which may help him in the inhibition of the psychopathic symptom aggregate. The patient is unable to control his psychopathic state by means of reasoning or exhortation, but he awakens another morbid state with accompanying symptoms of a psychopathic character. This awakened psychopathic state changes the trend of mental life with its psychomotor reactions. The old psychopathic state no longer occupies the mental field,—it must give room to another set of associations which may temporarily supplant the old psychopathic aggregate. The patient deliberately and voluntarily brings about various psychomotor conditions which help him to weaken the grip of the insistent psychopathic state. This is accomplished by stimulating a set of sensori-motor processes, accompanied by morbid emotional fear and anxiety states. If the patient worries about certain physical or mental symptoms from which he suffers, he calls forth some other symptoms of disease about which he will worry, or he may induce other sensori-motor reactions with similar feeling tone. The same result may be accomplished by voluntarily inducing ideo-motor states, *fear of evil omens, signs, tests, and magic charms*, bound up with similar feeling tone, mental states of the same or

similar emotional and feeling quality. New fear states are thus formed which temporarily may inhibit or at least modify, for the time being, the old, recurrent, psychopathic state. If the original state be indicated by P, the awakened sensori-motor or ideational processes by S and I respectively, their accompanying psychopathic state by P_1, the resulting mental conditions by P_2, then we may represent the total process, sensory or ideational, by the following formulae: $P+S+P_1=P_2$ (1), and $P+I+P_1=P_2$ (2)

The principle of metathesis or of modification is important in the determination of the course of development taken by the psychopathic aggregate. This continuous modification which the patient is forced to take to free himself from the grip of the pathological mental state keeps on extending, enlarging, and changing the pathological aggregate in various directions on ever new lines, giving new fear determinations to the psychopathic manifestations. The symptoms keep on changing, although the fundamental state with its initial experiences remains as the central, controlling nucleus which can only be discovered by a careful psychognosis.

This progressive series of fear determinations of the original psychopathic state makes it impossible for the patient himself to understand the original experience; and to grasp the primitive trend of the psychopathic nucleus in the gradual progressive course of its formation to the time of the acme of its development. A comprehension can only be fully attained by a thorough psychognosis of the case, and by the tracing of the psychopathic state or aggregate to its primordial nucleus. The physician can thus realize the history of the formation of the *ultimate fear states* constituting the present psychopathic system complex. The revelation of the primitive, psychopathic nucleus

unravels the complex skein of mental states, and makes it possible to differentiate the important from the unimportant, the essential from the inessential. This procedure is valuable from a psychotherapeutic standpoint, inasmuch as the finding of the nucleus makes possible its disintegration which in its turn helps the disorganization of the psychopathic aggregate.

This principle of metathesis or of modification may be regarded as a factor in the integration and disintegration of the psychopathic aggregate. The afferent, efferent; and central processes of the aggregate are modifiable[1]. The modifiability, however, is not the same for all the processes. The motor elements are the easiest to change, the sensory, and the glandular reactions with the afferent elements they give rise to are more difficult to modify, while the central, affective, emotional synthesis, being the total product, is the last to be affected. This law of modifiability is of consequence in Psychotherapy. We shall take up the discussion of this subject further on in this work.

The evolution of psychopathic systems follows along these principles. A close psychognosis of psychopathic cases reveals the paramount importance of these psychopathological principles in the life history of the psychopathic aggregate from its germinal stage to its fully developed state of organization. Each case, when closely investigated, clearly reveals these fundamental, psychopathological principles.

[1]The development of the psychopathic system on the principle of metathesis follows the evolution of the compound synthetic moment. See *The Foundations, Part II.*

CHAPTER VIII

THE LAW OF RECESSION

THE hierarchy of moments from the lowest to the highest, belonging to one organized constellation of moments, may be arranged in a series as to intensity and vividness of consciousness, ranging from minimum to maximum through all degrees of intensity and vividness. The maximum of intensity is in the focus or in the nucleus of the moment, the minimum is at the periphery. A moment, through frequent functioning, gradually loses intensity and vividness, and passes by degrees through the intermediary stages from maximum to minimum. The fading moment passes by degrees from the centre to the periphery of consciousness.

If, however, *the intensity and vividness of psychosis decrease from the center to the periphery, the extent of content increases.* The further away from the centre the greater is the number of the fading moments, and at the periphery the number of moments is also the greatest. The immense number of outlived moments gradually fade away with greater duration, and tends to pass to the periphery of consciousness. It is clear then that as we pass from the centre to the periphery the number of outlived moments increases proportionately. The deeper the regions of the subconscious the wider the extent of its contents. In hypnosis the intensity of consciousness becomes diffused over lower and lower moments, liberating their pent-up energy, and as with the depth of hypnosis the obscure regions of the subconscious are lightened up, their immense extents stand revealed before the astonished

and bewildered eye of the observing self-consciousness.

A lighting up of the subconscious regions can also be brought about by the use of opium or hashish. The pent-up neuron-energy becomes liberated from lower and lowermost moment, psychosis becomes concomitantly manifested and long forgotten experiences tend once more to the centre of consciousness, outlived moments become resurrected and rise to the surface of full consciousness with all the vividness of a present reality. Thus De Quincey in his "*Confessions of an English opium-eater*" tells us that "the minutest incidents of childhood or forgotten scenes of later years were often revived. I could not be said to recollect them, for if I had been told of them when waking, I should not have been able to acknowledge them as my past experience. But placed as they were before me in dreams like intuitions and clothed in all their evanescent circumstances, and accompanying feelings, I recognized them instantaneously." Hypnoidic states, such as described by me in my previous works, also reveal the wealth and extent of psychic content present in the lower subconscious regions. Glimpses into the subconscious are also given in hypnoidal states which are induced by the process of hypnoidization.

A moment, in passing from the centre of consciousness to the lower regions of the subconscious, is effecting its course gradually through all degrees of intensity, ranging from maximum to minimum. In learning to play a violin, for instance, the movements of adjustments are at first effected with much strain and intensity of attention, but a long course of exercise, practice and repetitions slowly reduce the strain and intensity of attention until the act of playing and the necessary motor adjustments for it require the minimum of consciousness and minimal amount of strain, in other

words, the act becomes habitual, automatic. A habit is not formed suddenly. A series of repetitions is requisite, each repetition making the next one easier and reducing the strain and intensity of consciousness, until the minimum is reached.

Of course, the minimum is relative for the particular moment-consciousness. Some of them have a higher and some a lower minimum, although none of them may pass the absolute minimum. This largely depends on the complexity of the moment. The more complex the moment is the higher the minimum, although they all have a tendency to reach ultimately the absolute limit. In other words, a more complex moment or aggregate of moments takes a longer time and a larger series of repetitions to reach the absolute minimum of consciousness. A simplification in the constitution of the moment makes the process of reduction more rapid, but the moment on its way to the minimum has nevertheless to pass through the different degrees of intensity. The course of this process is the one characteristic of the accumulative moment on its way to the simple form of reproduction, belonging to the type of the desultory moment-consciousness.* The passing through intermediate stages is a necessary condition of reduction of a functioning moment to a minimum of consciousness. In other words, the law of recession is the process of a moment's passing from the conscious into the subconscious, often effected by intermediate gradations.

*See *The Foundation*, Part II, *Multiple Personality*, *The Psychology of Suggestion.*

CHAPTER IX

THE LAW OF REVERSION

IN the reverse process, in the process of a moment's rise from the subconscious to the conscious, intermediary stages are not always requisite. The moment, buried in the obscure regions of the subconscious, may be lightened up with intense focal light of consciousness without passing through any intermediary stages. The direct or fading process is the dying away of light, the reverse process is the blazing up of a torch or the explosion of gun-powder. When we come to discuss the physiological aspect of the two processes, we shall see that there is a good reason for this difference. Meanwhile we confine ourselves to the statement of this difference between the manifestations of the two processes from a purely psychological standpoint.

That intermediary stages of consciousness-intensity are not necessary and often dropped in the reverse process, or in the process of the moment's rising from the subconscious to the conscious, we may clearly see from such a commonplace example as the forgetting of a once familiar name. We look and search for the name, we try all manner of clues, we strain our attention in the search after the lost link, but of no avail. In fact, the more we try the more we feel barred from the place where that lost link is to be found; we feel lost and wandering, and finally give up the whole affair in great despair and turn to something else. In the middle of our work when we have fully forgotten all about the search of the forgotten word, the name shoots up. No intermediary stage is passed, the whole state flares up at once.

The solution of difficult and complicated problems, of discoveries and inventions are known to occur in this way. Similarly in the phenomena of the various forms of sensory and motor automatisms the sensory images or the motor reactions, expressive of the rising psychic state, gush up suddenly from the depth of the subconscious self. They come complete, like Minerva out of Jove's head.

In hypnosis again, ideas and sensory motor reactions, induced by suggestion in hypnotic states to occur post-hypnotically or in the so-called hypnonergic state, may flash suddenly upon the mind of the subject. While in trance the subject may be told a word or a phrase and suggested that he should be unable to remember it on awakening, but that when he hears the word "now" coming from the experimenter, he should be able to remember. On emerging from the trance state the subject cannot voluntarily remember that word or phrase, although it may just be, as some say, on the tip of his tongue; he may be in a condition similar to the one when searching after a familiar word, but which somehow constantly eludes his mental grasp. Generally though, if the subject falls into deep hypnosis, his amnesia is complete and he cannot remember anything about the word, just as if it has been erased from his memory. No sooner, however, does the signal "now" reach him than the forgotten word or phrase immediately and instantly flashes upon his mind.

This sudden, "impulsive" rise of moments from the subconscious into the light of central consciousness can be even more clearly seen, more concretely realized, so to say, in the post hypnotic suggestion of the motor character. During hypnosis the subject is suggested to do a certain act on perceiving a certain signal, but that he should not have the least memory of what he is going to do before the signal is given. On coming out

of the hypnotic trance, if this be deep, he remembers nothing and may engage in something else; no sooner does he perceive the signal than he jumps up and carries out the suggested act with great impetuosity and lightning-like rapidity. The suggested psychomotor reaction, hidden subconsciously, appears in the light of consciousness as instantly as the discharge of the gun at the release of the trigger, or as the ring of the electric bell at the touch of the button.

If we turn to psychopathic cases, we once more meet with evidence of the same truth, we find instances the very essence of which consists in the fact that intermediary stages of the moment's transition from the subconscious to the conscious are completely wanting. The sudden onset of uncontrollable impulses and imperative ideas is notorious. Patients who have been quiet and listless for many months and even years rise suddenly, fell their attendant with one powerful blow, and immediately after return to their previous, listless state. The outburst is instantaneous. Suicidal and homicidal impulses, accompanying various forms of mental alienations, may have a sudden onset, and vanish as abruptly as they come.

Imperative ideas may also have the same flash-like appearance. The idea enters the mind suddenly, torments the patient by its insistency and then somehow unaccountably vanishes. These impulses and ideas are like meteors, they appear lightning-like on the mind's horizon, and then drop out of sight. Thus all the adduced facts now verge to one truth that reverse procession of a moment from the subconscious region to the light of consciousness need not be through intermediary stages.

It may also be pointed out that the same lack of intermediary stages holds true of the moment's retrograde movement when falling back into the regions

whence it has appeared into the focus of the upper consciousness. In fact, we may say that this fit-like process is often even more characteristic of the returning of the moment into the subconscious than of its coming. We all have experienced the fact how some ideas, whether familiar or not, often flash across the mind and the next moment disappear as mysteriously and as tracelessly as they come; they drop into the subconscious before the upper consciousness can seize on them, fixate them, and have them assimilated. Hypnoidal states are of such a nature; they are sudden upheavals from the depth of the subconscious, they often disappear from consciousness as suddenly as they appear. The same we find in the case of uncontrollable impulses, they invade consciousness, and get possession of it, like an attack, and then seemingly drop out of sight, sometimes not even as much as a trace or a vague memory is left.

In the states of hypnosis such coming and going of subconscious moments can be investigated more closely. During hypnosis a story may be told to the subject, and then a suggestion given that on awakening at the giving of a signal, at the hearing of a sound, the story should occur to the subject's mind, but not before, and that the subject should relate it, but that as soon as he finishes, the whole thing should immediately lapse from his consciousness. If the subject takes post-hypnotic suggestion, and is capable of that stage of hypnosis where amnesia can be induced, then the rise and fall of subconscious moments are almost instantaneous, palpably demonstrating the truth that the subconscious moment does not necessarily require to pass transitional stages in consciousness, whether forwards or backwards, whether it enters from the ubconscious to the focus of consciousness or leaves he focus to be sunk into the subconscious.

This law of reversion with its want of intermediary stages in the history of the rise and fall of the subconscious moment is not uniform. The subconscious moment may rise slowly, pass in a general, rough form intermediary stages of intensity of consciousness, enter the focus, and may again in departing fade away slowly, by degrees, passing through all grades of consciousness-intensity in its backward course. This is especially frequent in cases when the given moment rises spontaneously from a great depth of the subconscious. The moment seems to struggle on its way with many obstacles, hence its oscillations, its many failures in its rise to full intensity.

The same thing occurs in the different forms of sensory and motor automatisms, also in states of hallucinations and in some hallucinations found in the dream consciousness. The reversion of the moment is accompanied by increased sensory intensity, assimilating on its way in the reverse direction from the subconscious to the focus of consciousness as many experiences as possible with their primary and secondary sensory elements.* The sensory intensity gains in proportion as the vividness and clearness of abstract associations diminish in activity. The moment, buried in the depth of the subconsciousness, does not stand out clear and distinct, but often struggles up in an aborted form as a series of failures, blunders, and errors.

This reversion of the moment from the subconscious, this rise of the hidden moment to the focus of consciousness, and the subsequent recession into the subconsciousness, with the increase of sensory intensity as the moment forces its way in the reverse direction from the subconscious to the conscious may be termed *the law of moment reversion*, while the two movements, the reversion and the recession, constitute the *cyclical movement of the moment consciousness*.

*See *Multiple Personality, The Foundations, Symptomatology.*

CHAPTER X

THE PROCESS OF DEGENERATION

EACH stimulation leaves after it some moment-disaggregation, a condition that makes further disaggregation more difficult. The more intense the stimulation is, the more extensive and deeper is the disaggregation, and hence the more difficult further disaggregation becomes. If the stimulation is continued or made highly intense, a point is soon reached beyond which no stimulation can pass without giving rise to disaggregation, having as its manifestation the different forms of *pathological* mental dissociation. The pathological process, underlying the phenomena of abnormal mental life, is not essentially different from the one taking place in normal states. If difference there be, it is not certainly one of a quality, but of degree.

The more intense a stimulation is, the more extensive is the process of disaggregation, the higher mounts the moment-threshold, giving rise to the different phenomenon of psycho-physiological and psychomotor dissociation. As expressed in a former work: "The process of disaggregation, setting in under the action of strong and hurtful stimuli, is not something new and different in kind from the usual; it is a continuation of the process of association and dissociation normally going on within the function and structure of higher constellations. The one process gradually passes into the other with the intensity of duration of the stimulus."

The process of disaggregation is a descending one, it proceeds from constellations to groups. Under the

influence of strong stimulation, such as mechanical and chemical agencies, and psychic affections, such as intense emotions of fear, and their derivatives, the degenerative process of disaggregation sets in, affecting first the higher aggregates, and then with the continuity and intensity of the stimulations the process descends deeper and deeper, affecting less complex aggregates, finally reaching the simplest aggregates of moments. The higher types of moments degenerate and fall to lower and lower stages of consciousness.

The law of moment disaggregation as that of degeneration is from the complex to the simple. The lower moments, on account of the simplicity of their organization, are more stable than the more complex and higher moment, and are in a better condition to resist the disaggregating action of hurtful stimulations.

Furthermore, the lower and simpler an aggregate of moments is, the older it is, either phylogenetically or ontogenetically, and therefore, its stability is more firmly assured by selection and adaptation. In the course of the life-existence of the individual and the species lower types of moments have come more often into activity, since the higher an aggregate is, the later does it rise in the history of evolution. Hence moments that are not working smoothly, are continually weeded out.

This same process is going on not only in the history of the species by the eliminating action of natural selection, but also by the special adaptations brought about in the life experience of the individual. In phylogenesis the best and most firmly organized instincts survive, while in ontogenesis those habits are consciously or unconsciously selected which are most firmly established and are best adapted to the given end. At the same time the older a reaction is, the more thoroughly organized it becomes, the more is it enabled to withstand the onslaught of external hurtful stimuli. The

same holds true in the case of habits. A habit of long standing is well organized, and it is often extremely difficult, if not impossible, to control.

Food reactions, sex reactions, social reactions, and personal moral life form an ascending series both as to time of appearance in the history of the species as well as complexity of structure and function. Food instincts in time and simplicity precede sex instincts, and sex instincts in their turn precede social instincts which antecede personal, moral life. Now we find that the instability is in the same ascending line. Food reactions are more stable than sex reactions, sex reactions are more stable than social reactions which are more firmly organized than a highly unified personal life, guided by a moral ideal. The structure and functions of the system of alimentation remain unchanged for ages; the sex reactions may become slightly modified for some period of time; the functions relating to social life vary from generation to generation, while moral life, guided by moral ideal is highly individualized and personal.

In the downward course of mental disease-processes the degeneration is from the complex to the simple, from the stable to the instable, from the highly organized to the lowly organized. In the different forms of mental diseases first moral life, then social reactions are affected, the patient loses all regard for others, becomes careless, wasteful and negligent of his vocations, life-work, and duties.

In certain forms of mental alienation, such as melancholia and paranoia, the patient becomes suspicious of others, of his near and dear ones, becomes cruel and revengeful, sometimes ending by attacking his own friends and near relatives by committing homicide. When the deterioration of personal moral life and social reactions is well under way, degeneration of other

functions sets in,—the patient gives himself over to excesses, to all kinds of debauches, and indulges in the different forms of abnormal sexual practices. Only very late in the course of the disease are the food reactions in any way affected.

The phenomena manifested under the action of narcosis go further to confirm the same point of view. Moral, personal life is the first to succumb, other activities follow in the order of their complexity and duration of function. In other words, the law of disaggregation or that of degeneration is from the complex to the simple, from the highly organized to the lowly organized, from the least stable to the most stable. This stability is proportionate to the complexity of moment aggregates, and to the frequency and duration of their associative activity.

In habits, formed within the life time of the individual, the same law holds true. Old habits are inveterate, habits formed in childhood and perpetuated can hardly be eradicated, while those that are formed later in life become more easily dissolved. Complex habits, formed in late life, relating to moral life and social intercourse, become dissolved at the first onset of the process of mental degeneration, while habits formed early in life, such as handling spoons, fork, and plate or dressing and buttoning the coat long resist the degenerative process. Paretics and patients of secondary dementia, though far advanced on the downward path of degeneration, are still for some time able to attend to the simpler functions of life, such as dressing and feeding. Once more we are confronted with facts pointing to the same law that the process of degeneration of which disaggregation constitutes a stage is from the highly to the lowly organized, from the complex to the simple, from the *rational* to the *automatic*.

Even in the lighter forms of psychic degenerative forms that lie on the borderland of mental alienation, such, for instance, as are present in the various forms of psychopathic maladies we still find that the same relation holds good. Moral, personal, rational life is the first to be affected. Social activities follow, while disturbances of sex and food reactions set in late in the course of the pathological process of disaggregation and degeneration.

In psychopathic cases of advanced standing the process of degeneration brings about a simplification of life. The complicated systems of mental and moral life are dissociated, disaggregated, and disorganized. Like in a flood, the rich soil deposits are swept away and the primitive bed rock is left exposed to view, in the case of psychopathic patients all higher structures and functions are temporarily suspended, the most primitive impulses and instincts, serving the preservation and protection of the individual, remain,—the impulse of self-preservation with its accompanying instinct of the fear instinct reigns supreme. Fear rooted in the primitive impulse of self-preservation forms the pathology of psychopathic diseases.

CHAPTER XI

THE IMPULSE OF SELF-PRESERVATION IN PSYCHOPATHIC DISEASES

AS we have pointed out the fear instinct is the arousal of the impulse of self-preservation. Psychopathic conditions are at bottom fear states which in turn are based on the abnormal, pathological conditions of self-preservation. This is manifested in the fundamental trait of extreme selfishness characteristic of all psychopathic patients. The patient is entirely absorbed in himself and is ready to sacrifice every one to his demands and cravings.

For many years, day after day and night after night, I lived with patients who were under my care, observation, and treatment. One trait always revealed to me the predominant characteristic under the constantly changing psychopathic symptom-complex and that is *the extreme selfishness of the patients*. There is no greater egotism to be found than in the typical cases of psychopathic affections. This egotism runs parallel to the condition of the psychopathic state. This does not mean then that every egotist is necessarily psychopathic, but every psychopathic case is essentially egotistic. The psychopathic patient does not hesitate a moment to sacrifice to his "affection" father, mother, brother, sister, husband, wife, lover, friend, and children. In severe cases the patient stops at nothing, and only fear of suffering, sickness, evil consequences, and punishments can alone restrain the patient. In some extreme cases the patient is occasionally almost diabolical in his selfishness.

The constant sympathy which the patients crave from others and which they demand, if it is not given to them immediately, is but an expression of their extreme obsession by the impulse of self-preservation. In their struggle for self-preservation they forget everything else, nothing is remembered but themselves. This condition becomes the ground character which is often expressed in a frank, brutal way. Even in the best of patients one can find glimpses into the depths of the psychopathic soul which is nothing but the immense egotism of the beast, worsted in the struggle for existence, tortured by the agonizing pangs of the fear instinct.

In the vanity, conceit, arrogance, and overbearing attitude towards others, friend or stranger, as well as in the total indifference to the suffering of his intimate friends and acquaintances we once more find the expression of that infinite selfishness which obsesses the psychopathic patient. In order to get rid of some slight inconvenience, or to obtain some slight pleasure the patient will put others as well as his "near and dear ones" not only to inconvenience, but to permanent pain, and even torture. The patient lacks confidence, at least that is what he complains of, but he does not hesitate to demand of his best friends and even of total strangers all the services possible, if they are given to him, thinking that he is fully entitled to them. The patient has the conceit and vanity of his great worth in comparison with other people. The world and especially his family, friends and lovers, should offer their happiness and life for his comfort.

Even when the psychopathic patient does some altruistic act, it is only in so far as he himself can benefit by that deed. He is ready to drop it as soon as the work does not answer his selfish purposes.

Himself first and last, that is the essence of psychopathic life.

The patient is convinced of his goodness and kindness and of his human affections which are far superior to those of the common run. He adores himself, and he is always ready to dwell in the glory of his delicacy and extraordinary sensitivity. This trait he is specially anxious to impress on his friends, on his family, and even on those whom he apparently loves. "I am the delicate being of whom you all, unappreciative, gross, insensible people, should take care." That is the principle on which the psychopathic patient lives. The patient will do anything to attract attention to this side of his personality. He will emphasize his sickness, exaggerate his symptoms and even manufacture them for the benefit of those who dare to ignore him or who pay little attention to his condition, to his wants, needs, caprices, and passing whims. There is nothing so tyrannical and merciless as the autocratic "weak" will of a psychopathic patient once he gains ascendancy.

The patient's whole attention is concentrated on himself, or more specially on the symptoms of his psychopathic malady, symptoms which obsess him for the time being. Whatever the symptoms be, permanent or changing, the patient's demand is to have others sympathize with his illness from which he suffers, to have them realize the fearful agonies which he undergoes. The selfishness of the patient is exacting and knows no bounds. The whole world is to serve him, and be at his command. The psychopathic patient is driven by the impulse of self-preservation and by the furies of the fear instinct.

Many of my psychopathic patients tell me that they feel sensitive as long as they witness the sufferings of other people, otherwise they do not care to know any-

thing about them. They are anxious to have such things away from them as a nuisance. They insist on being surrounded only with pleasant things or with persons and objects that contribute to their health. Everything is absorbed by the worship of the Moloch Health to whom the patients sacrifice everything. Pain, suffering, and distress of other people are looked at only from the standpoint of the possible effect they may have on the patient's precious health. Like Nero, who was probably of a psychopathic character, the psychopathic patient is ready to burn others for his health; if necessary, to torture health out of others.

One of my patients, who is very intelligent, tells me frankly that he uses others to squeeze out of them strength for himself. As soon as he can no longer get it, or has obtained all he could, he is anxious to part with them, gets tired of them, and even begins to be resentful, because they are in the way of his health. Another of my patients was ready to burn parks, stables, and destroy everything, if he knew that it was good for his health. Other patients of mine do not hesitate to wake up the whole house of people to help themselves in insomnia or indigestion. Many of my patients take pleasure in forming acquaintance and even friendship with people, ask for their sympathy, require their help and assistance, come to them early in the morning and late at night, disturb their sleep in the small hours of the morning, display all the symptoms of indigestion, nausea, eructation, and vomiting. Then the patients turn round, abuse the person who helps them, telling him disagreeable things, because he is no longer useful. A few hours later the patients may turn again for help to the same person, because they find that they could still make use of him.

Psychopathic patients do not hesitate, for the alleviation of their pains, of depression, of insomnia, to

take a bath in the early morning and wake up all the other patients. The others will not hesitate to do the same. They are entirely absorbed in themselves. Self is the only object of their regard. A patient, a clever lawyer, aptly characterised one of my most severe and most typical psychopathic cases as "egomaniac." "When you talk of gravity, 'I am gravity' she claims. Talk of the Trinity: 'I am the Trinity.'" As a matter of fact, every psychopathic patient is an egomaniac. Bacon's aphorisms about self-lovers may well apply to psychopathic patients:

"And certainly it is the nature of extreme self-lovers, as they will set an house on fire, and it were but to roast their eggs. . . . . .

"That which is specially to be noted is, that those which are *sui amantes sine rivali*, are many times unfortunate."

Driven by the impulse of self-preservation and by the anguish of extreme fear, the psychopathic patient may be pitied as a most unfortunate, miserable wretch.

In the psychognosis of the particular condition, mental or nervous, be it object, idea, or action from which the patients suffer, the instinct of self-preservation with its instinctive emotion of fear can always be found in the background of consciousness or in the subconsciousness. An insight into a series of cases will help best to understand the fundamental, psychopathological processes that give rise to the different forms of psychoneuroses and somatopsychoses.

The inhibition of the patient's activities, with the exception of the most primitive impulses of self-preservation with its instinct of fear, limits the patient's life to such an extent that the interests and the activities are reduced to automatic repetition of reactions to stimuli of a stereotyped character. The stimuli

must be the same otherwise the patient does not care to respond. He loses interest in his business, in reading, in his work, and games. The attention keeps on wandering. Games, pleasures, and hobbies in which he formerly used to take an interest lose all their attraction for him. The life he is disposed to lead is of a vegetative existence. He is afraid of anything new. The things are done in an automatic way. *Routine and automatisms are characteristic of his activities.* At first the patient tries to shake the slumber of his life, but afterwards he gives in and submits to the monotony which still further emphasizes the pathological process.

This routine life is a reaction by his organic, biological processes against the onset of the pathological processes. Meanwhile the family, or friends, and even physicians, noticing this tendency in the patient, advise him to occupy himself, to forget his troubles, to get pleasures, to see some interesting things, and thus become distracted. This is often effected by taking the patient away from his environment and making him travel in foreign countries. While distraction of attention may be of use in some cases where there is brooding, due to some misfortune, it is certainly of little use and even harmful in many psychopathic cases.

Before proceeding with the other factors we may bring a few cases, showing the factor of self-preservation with the fear instinct as its manifestation.

As a little girl Mrs. R's health seemed well. She was active in out-of-door games which she enjoyed. She was only a middling student.

R. received little training of any sort from her mother, and was regarded by the neighbors as a "pert" child. She was never given household tasks to do and she always disliked housework. As a child, if she was refused anything she wanted, she would cry and scream

and kick till it was given her, and even up to 18 years of age would throw herself about on the floor, screaming when she thought herself misused.

For the last twenty years she has regarded herself as an invalid. She complains of headaches, backaches, pains in the chest and abdomen, "indigestion," lack of appetite, and many other ailments. Not all of these complaints all the time, but never free from some of them.

She is fond of company, likes to gossip, to play bridge, and to dance,—provided always that her husband or mother is present. Her comments on her neighbors are usually very harsh, and, while much interested in them, she has little sympathy. The summer vacations are spent at a camp; she enjoys fishing and motoring there, but is never free from her aches or her fears.

She is always eager to talk about her ailments. She will cry and moan and say she wants to get well, and fears she will "do something rash." She says she thinks she might "do away with herself," if she should find herself alone in the house. She fears she may go insane.

She has no real interests in life. When she wakes in the morning, she wonders how she is going to get through the day—how kill the time.

Besides these various complaints and fears she is full of other phobias, the result of child fears. She fears to be left alone in the house or to go out alone on the street. For fifteen years she has not gone alone from her home to the business street of the village,—always her husband or her mother must be with her. Either her husband or her mother is with her every hour of the twenty-four, not in the same room necessarily, but in the house. She will not walk on the street with a group of people whom she has known all

her life unless her husband or mother be of the party. She will drive her husband's automobile, a big touring car, and enjoy doing so, but her husband or mother must be in the car. She also has great fear of crowds; even with her husband she insists on sitting in the rear pew at church. If the rear pew is occupied she will go home, though there may be plenty of vacant seats further front. She is terribly afraid of disease, germs, and contagion,—she is always very anxious and in a panic on this matter of disease.

Mr. B., age 28. Patient worked hard; timid, lack of will, of persistence.

A couple of years ago, after death of grandfather, had fear of death, lasted for five months. Two years later, relations with girl, abortion, fear of being prosecuted, of being accused of the crime. Has also other fears and anxieties, such as of money, also of signing his name wrongly, or other illegal acts, fear that he may become insane, inefficient, incapable. Suspects people of knowing him or of knowing the girl, and possibly reporting to the police. Cries, intense fear and anxiety. Knows that the object of fear is unreal; the emotion is too strong for him, it has become associated with everything he does or reads. Fears come over him, over reminiscences from childhood, lest he has done something bad or evil. Psychoanalytic physicians have especially helped in cultivating those harmless memories of childhood, and have associated them with the central instinct of fear and anxiety. The patient is extremely self-centred, thinks only of himself, inordinately selfish. Obsessed with self and fear.

Mr. F., age 32, graduate of Cornell. Masturbated when young; read literature on the subject and began to worry and fear about the consequences, began to dream, had sexual dreams which frightened him more; worried more, read more, and dreamt more. Entered

college (Cornell), and felt miserable, obsessed with fear of mental ruin. Laid up with sprained knee for a few weeks (age 21); became constipated; physician spoke about auto-intoxication. Feels bad; physician ascribed to bowels, then began the fear consequences. (Psychosomatic.) Feels depression and headache (thinks due to auto-intoxication.) Had some headaches in school (probably thinks he had.) When a child he was very timid, sensitive, and shrinking, diffident, "painful to talk to him." Had a dread and terror of his parents, who were severe with him, used to beat him mercilessly. Had strict religious training, was very conscientious about religion. Always worried about his health; is extremely selfish.

Obsessed by the impulse of self-preservation and fear-instinct, and with utter disregard of others, the patients are convinced of their extraordinary kindness, gentleness, sympathy, martyrdom, and even saintliness. It is from this class that all the neurotic philanthropists are recruited. Psychopathic patients are always ready to sacrifice themselves for the good of humanity, they talk endlessly about goodness, and may even devote themselves to charity work and instruction for the "poor and degraded." A patient of mine worked for three years for the good of the poor, had "high ideals and a sensitive conscience," according to his accounts, but abandoned readily his wife and children. Another patient, a young woman, a typical psychopathic, full of high ideals, ran away with a married man, had a child that died by exposure. This patient was interested in modern education and improvement of humanity. She never cared to do anything for anybody, and without any hesitation took advantage of others in order to satisfy the least whim that might have crossed her mind, especially those whims that relate to health. She had all kinds of directions, pre-

scriptions, exercises, requisite for the strength and health of the body and the nerves.

One of my patients was afraid when I happened to go away; he used to be anxious about my going and my coming. Was it love or devotion? I found out that he was afraid that I might be killed. This fear was developed in him by an actual accident in which his brother had died, but the same fear associated with me was due to the fact that the patient was sure that my treatment was requisite for his health and welfare. He was in fear lest I might be killed, he would be unable to get his treatments, and thus lose time in getting back his health.

For the sake of his "health" the patient will not stop at anything short of murder, and even that will only be on account of the evil consequences to his health. There is no wonder that the "Christian Science" neurotic has well named her trouble "Health and Science." This is essentially psychopathic. *The psychopathic makes of health his science and religion.*

The psychopathic patient may be regarded as a case of parasitism. The parasite, living on his host, gradually loses all active functions, a condition followed by atrophy of organs no longer necessary to the life existence of the organism. According to Demoor, "Atrophy begins with function when an organ has become useless. This uselessness may arise from two causes; the function may be no longer useful to the individual or to the species, or it may be assumed by another organ." When an organism turns parasite, it is an economy of nutrition and energy to save as much as possible. The tendency of parasitism is to dispense with unnecessary functions in the struggle for existence. The loss of function and atrophy is from the less useful, to the more useful, to the functions absolutely indispensable to survival; from the less essential,

to the more essential, to functions absolutely essential to the life existence of the individual. The life activity of the parasite becomes more and more narrowed, circumscribed, and dwindles down to a few functions requisite to its life existence, namely self-preservation, nutrition, and reproduction. With the further increase of parasitism even the digestive and reproductive functions become simplified, the parasitic individual becomes reduced to the most fundamental of all impulses, the impulse of self-preservation.

The penalty of parasitic life is the simplification of organic activities, the atrophy of all higher and complex life processes. This is what takes place in the case of the psychopathic individual. All higher activities, all higher interests cease; in many cases even *the sexual instinct becomes gradually atrophied, the patient's life is being narrowed down to the impulse which is absolutely requisite for life existence, namely the impulse of self-preservation with its concomitant fear instinct.*

The growth of the impulse of self-preservation with its fear instinct brings about their hypertrophy which in turn hastens the degenerative process of atrophy of all higher and more complex activities. The psychopathic patient in the process of degeneration and atrophy falls so low that not only moral, social, and intellectual, as well as other psychomotor processes become gradually diminished and atrophied, but in *many cases even the instinct of reproduction, requisite for the preservation of the species, is made subservient to the impulse of self-preservation and the fear instinct.* In psychopathic life all activities are narrowed down to the pettiness of individual existence. All psychopathic interests are reduced to the sorry life of self and fear.

Lacking interest in anything but himself, terrorized by the fear of existence, the psychopathic patient lives a dreary, monotonous life out of which he seeks to

escape. Monotony, *ennui*, indifference form the curse of his life. The patient is in a frantic condition, constantly in quest of interests which he cannot enjoy. Nothing can interest him, because he has no other interest but himself, and that is so narrow, that it can hardly fill existence. As a matter of fact he is afraid to meet his fears, he is afraid of himself. He is bored with himself, bored with everything and with everybody. He is constantly eager to find new pastures and new excitements, so as to fill with some living interest his poor, narrow, mean, short existence full of fear, misery, wretchedness, and brutish selfishness.

The patient is afraid of work, because it may "fatigue and exhaust" him, and may bring about a state of disease, while he looks for health. He has no interest, because he thinks only of his little self, reduced to digestion, evacuation, and sleeping. The psychopathic patient leads an inactive existence of a sluggard, a lazy, idle existence of a parasite, and still he is driven to life and activity which, from the very nature of his narrow, parasitic individuality, he can no longer enjoy. He has the ideals of a hero and lives the life of a coward. Obsessed with the anxious fears of the self-impulse he avoids the terrors of life, and drags the grey, monotonous existence of a worm. Hence there is a tendency in the psychopathic patient to be on the lookout for ever new energetic personalities, lean on them, suck out all the energies he possibly can, then reject his new friends unhesitatingly and brutally, and be again in search for new personalities who can disperse, for ever so brief a time, the fearful monotony and dread of his miserable, psychopathic existence. That is why the patient may be characterized as a psychopathic leech, or truer still psychopathic vampire. For it is on the life and blood of other people that the psychopathic ogre is enabled

to carry on his bewitched, accursed, narrow, selfish existance, full of terror and anguish of life.

The following account by Schopenhauer describes well the psychopathic individual:

"The aim of his life is to procure what will contribute to his bodily welfare, and he is indeed in a happy way, if this causes him no trouble. If however the luxuries of life are heaped upon him, he will inevitably be bored, and against it he has a great many fancied remedies,—balls, theatres, parties, cards, gambling, horses, women, drinking, travelling, and so on (had Schopenhauer lived in contemporary America he might have added New Thought, Christian Science, and other cheerful religious metaphysics and psychoanalytic, Freudian twaddle); all of which cannot protect one from being bored". . . . . "Nothing really interests them but themselves. They always think of their own case as soon as ever any remark is made, and their whole attention is engrossed and absorbed by the merest chance reference to anything which affects them personally, be it never so remote; with the result that they have no power left for forming an objective view of things should the conversation take that turn; neither can they admit any validity in arguments which tell against their interests or their vanity. . . . . They are so readily offended, insulted, or annoyed that in discussing any impersonal matter with them, no care is too great to avoid letting your remarks bear the slightest possible reference to the very worthy and sensitive individuals whom you have before you, for anything you may say will perhaps hurt their feelings. True and striking observations, fine, subtle, and witty things are lost upon them; they cannot understand them. But anything that disturbs their petty vanity in the most remote and indirect way, or reflects prejudicially upon their exceedingly precious selves,—to that they are most tenderly sensitive. In

this respect they are like the little dog whose toes you are so apt to tread upon inadvertently—you know it by the shrill bark it sets up; or again they resemble a sick man covered with sores and boils, with whom the greatest care must be taken to avoid unnecessary handling. And in some this feeling reaches such a pass that, if they are talking with any one, and he exhibits, or does not sufficiently conceal his intelligence and discernment, they look upon it as a downright insult; although for the moment they may hide their ill will, their malice, and hatred."

The love of the psychopathic patient is at bottom self-love, it is like the love of the wolf for the lamb. Lover, husband, child, friend, father, mother, brother, sister are all for the patient's self. "When the attack is on" exclaimed a psychopathic patient, affected with cardiac palpitation and intense fear, "I am too d——d scared about myself to think about her!" The psychopathic patient is a parasitic ogre with an hypertrophied ego. Patients who claim to love children when the latter are well and healthy, avoid them, like a pest, when the children happen to fall sick, for fear of disease and for fear of the sick children, producing an evil influence on the patient's "sensitive" nerves. The patient is afraid to come near sickness, or even afraid to hear of evil things, such as descriptions of misfortunes, ailments, accidents, and sufferings, because they may upset him and arouse his fears about himself. All the patient wants is to be surrounded with cheer, joy, merriment, excitement, and happiness which he is unable to enjoy. The psychopathic patient is in constant search after happiness. Not that he is interested in the problem of happiness from a moral, philosophical or even purely religious standpoint. His interest is of the crudest, the meanest, the most selfish kind. It is happiness for self, a low, mean, short, and brutish self.

Psychopathic happiness is not human, it is the anguish of the beast, cornered by terror. The patient is tortured by happiness, tantalized by fear. Egotism, fear, and *ennui* are the harpies of psychopathic life.

I take almost at random a few quotations from the writings of a psychopathic patient, writings which may be regarded as typical of all other patients: "What truths must I realize to become happy? How shall I get an absorbing interest and be happy? How am I to feel happy about the right things? What is this vague discontent, because I do not desire people's welfare? Is it wise for people to get all kinds of healthy happiness they can? (Patient claims to be scrupulously religious, extremely conscientious, and highly moral). My happiness is affected by the happiness of others. That is as it should be, is it not so? . . . Knowing my abilities and circumstances to what extent is it possible for me to obtain happiness? . . . What are the means by which my happiness may be brought about? . . . How far should I pursue the happiness of others? . . . What interest shall I have or cultivate so as to make my life happy? . . . I want to do the high and the great. Must I not grow from the small to the high? . . . When I get well and free from my fears will I feel that if I thought things out they would be all wrong while I will feel strong and happy? . . . Should I be contented to do humdrum things? . . . What is the secret of greatness and of happiness?" . . .

Psychopathic patients subscribe to the "cheerful" effusions of "New Thought," and plaster the walls of their rooms with elevating "Rules for Health and Happiness."

The writings and accounts of the patients are full of introspection about health and about the minutiæ of their feelings in the various parts of their body. Some

of the patients with a literary turn keep on writing volumes about the most minute symptoms of their trouble to which they happen at any moment to be subject. I have numbers of manuscripts, biographies, autobiographies all telling the same old story of "blighted lives" due to ill health, drugs, and treatments, all describing with the over-scrupulous exactness of microscopic anatomy the different symptoms that plague them by night and day. The patients tell of their talents and remarkable abilities superior to the average run, of their ill luck and failures, due to their unfortunate state of ill health.

In quoting from some of the accounts given to me by the patients themselves I wish to attract attention to this side of the patient's mental condition, the expression of the impulse of self-preservation, manifested in the general panic of health, or fear of disease, whether mental, nervous or physical, phrenophobia, or pathophobia.

I give a couple of illustrations of accounts given to me by patients. These accounts of symptoms are put by the patients in the form of precise bookkeepers' inventories. The symptoms are described with the most exacting minuteness. Such summaries are often accompanied with long winded annotations and appendices:

"S. P. S. Age forty. Average weight 160 lbs. Married. Profession, lawyer and author.

"No bad family history. No syphilis, scrofula, or insanity. No organic disease, except enlarged prostate.

"Neurasthenia, perhaps congenital. Objects like fishes floating before the eyes. Incessant *tinnitus aurium*. Occasional subjective odors and tastes. Eczematous eruptions.

"These symptoms have appeared years ago, some of them as results of the grippe.

"Hay-fever with asthma for years, a very bad case. Produced great prostration. Some symptoms of this disease present the year round. Occasional insomnia. Occasional nocturnal and diurnal horrors. Inability to remain quiet or composed.

"Enlarged prostate,—left lobe principally.

"Uric acid diathesis inherited from both sides, producing muscular and arthritic rheumatism.

"Numerous attacks of grippe, with great susceptibility to them.

"Had all children's diseases but mumps.

"Natural somnambulism and sleep-talking till puberty.

"Great irritability of temper.

"Occasional aphasia, inability to pronounce such words as "prelate;" rarely, slight stammering.

"Almost absolute lack of concentration. Great impairment of memory. Occasional great depression of spirits. Occasional inclination to cultivate obsessions, controllable by will-power. Sometimes experiences of auditory hallucinations.

"My trouble is inability to work even moderately without having as after effects physical agitation and heightened irritability, shown in bodily sensations, in restless and jerky movements of hands and feet and—on occasions of suspense or conflict—in violence both of manual and vocal expression; the motor discharges passing, it would seem, through the lower centers without giving higher centers a chance at them; for will power and higher control generally is certainly not weakened, where there is time for its exercise. (I say 'time,' but of course the true differentia may be something else). These effects increase with continued work till it is manifestly time to stop and wait for some weeks or months till they wear off.

"My occupation is that of editorial writer. In it I both earn a living and keep myself in touch with the material for an investigation which is of dominant interest to me, viz., the social functioning of the social man, which involves on one side the social statement of the theory of knowledge, and on the other the interpretation of society in terms of the knowing man. Forget this detail, and remember only that my main interest and activity is one which—regardless of the detail as to whether my ultimate product is good or bad—involves high pressure brain work while I am at it.

"My recent history is as follows: Three years ago I stopped work and began to cry (conventional style). One year ago after a return to the office had been followed by return to investigation I developed 'emotional exaggeration,' as described in following memoranda, and also tendency to motor violence, as mentioned above. After a summer on a farm, followed by three months of investigation (without office work) three to five hours a day, the motor phenomena are at the front, and I have had to stop work again.

"Three years ago Dr. R. of this city pronounced me physically sound all over, after all the usual tests. He has repeated the verdict this week, and my reflexes, etc., have been tested and pronounced normal by a nerve specialist of this city (rather, by his assistant), whose name I omit because of the nature of my description of his report on me attached hereto.

"I enclose herewith:

"A memorandum of history of my case.

"Extract from a personal letter of my own, describing the examination I have already received.

"Memorandum by my wife in regard to questions put to her by physicians here.

MEMORANDUM

"Age, 40. Married 10 years. Have had no children.
"Father, died 65, bronchitis and heart, etc. Sedentary life, placid.
"Paternal grandfather, stopped work, poor health 35-40. Died 85, cancer.
"Mother, nervous till past middle age, sick headaches, fidgety feet.
"Mother's near family, two or three deaths by 'paralysis.'
"Other grandparents, one, cancer in old age; one, cholera young; one young, cause of death unknown to me now.

"My boyhood: 'nervous child;' alleged 'sensitiveness to noises.'
"Diseases:
1881 (age 11) Vaccination poisoning. Sores on face and body.
Effects lasted three or four years. Think took mercury (?) pills for even longer time.
1886-7 Broke down while in college at D.
Returned home in N. in spring. Feeble through the summer. Note sharp and complete cessation of self-abuse two or three months before this breakdown.
1888 or '89 Violent headache. Astigmatism. Glasses gave relief.
1898. Typhoid fever. First light, then relapse and delirium.
Confined to room perhaps seven weeks.
"Occupations:
School to 1887.
'87-'90 In a business office.

'90-'92 J. H. University, undergraduate work, two years.
'92-'96 Graduate work, Germany, Ph. D.,
'96-'03 Reporter and City Desk.
'03-'10 Editorial writer.

"Present trouble:

"Remember nothing to report during college period, nor reportorial, save that one time, perhaps '03, I combined unwonted executive duties with a rushing piece of magazine work in midsummer, and was highly wrought up before finishing it.

"Winter, '07-'08. Doing regular editorial work, correcting proof sheets of a book on government that appeared in the spring of '08, my father was seriously sick for a time, and certain business matters, not my own, had to be watched by me. Result, February, '08, cursed everybody in the office one day, wanted to run away, instead walked home, had conventional hysterics, and felt weak enough to stay in bed for a week or more. Some temperature. A fool doctor, first comer, talked about inflammation of the brain, or hemorrhages or something of the sort, but thorough examination later showed blood pressure and everything else normal.

"March-July, '08. Europe.
Too much excitement, too many friends, too much to eat and drink.

"July, '08. Recalled suddenly by father's new sickness. His death followed.

"Fall, '08. Occupied by repellent business affairs.

"December, '08 to March, '10. With newspaper again.

"I did not begin investigations on the lines of my dominant interest until July '09.

"December, '09. Quit personal reading and investigation.

"January, '10. Quit smoking after perhaps 18 years steady habit.

"February, '10. A short vacation gave no relief.

"March, '10. Quit newspaper work.

"April-September, '10. On an Ohio farm, leisurely work.

"September-December, '10. Took up personal investigations, three to five hours a day, five days, perhaps, a week. Gradually improved for six or eight weeks, then grew rapidly worse. Did not return to newspaper.

"December, '10. Quit.

"Body Conditions:

Digestion good. A slight constipation will greatly increase feeling of agitation and irritableness. Sometimes bodily agitation seems localized along oesophagus.

"Sleep:

Usually very good. When I can work I sleep nearer nine hours than eight. After a motor explosion will be exhausted and sleep well. Of late apt to be wakeful in early morning hours, but rarely is the wakefulness combined with agitation. Agitated wakefulness was common for a short period in spring of 1910.

"Morning hours, especially after breakfast, worst time.

"Winter. My bad times have been in winter.

"Warm Baths. Always soothing.

"Sex. Desire neither increased nor decreased. Moderate.

"Thighs. Numbness and stinging sensations in left thigh in fall of '08. Did not recur till fall of '10. Then noticed in middle front of left thigh, and

above right knee. Pains superficial. Numbness, burning, stinging, sometimes violent stabbing pains, pressure sensations. Noticeable in general only when walking, but at their worst also when standing and even when lying down. Sometimes caused me to halt, but have taken long cross-country walks despite them. Pains have ceased entirely within last month, since general condition became worse.

"Liquor. Use very little, even at meals. Purely a social matter. Since days when I was a reporter the only time of fairly steady drinking was in Paris in '08.

"Smoking. Became distasteful in winter months of '09 (Nov.-Dec). Later produced marked stimulation of pulse, also seemed to increase irritableness. Stopped entirely January, 10, except for half a dozen smokes last of which preceded a slight nausea.

"Mental condition. My private opinion is that I never could work so effectively as now, either as regards fertility or balance. Under the conditions however, I do not pretend to be a judge of that. By 'effectively' I refer to tests entirely within the work being done, not to any value the work may or may not have by social tests.

"Self-control. It seems stronger, if anything, within a certain range, that is, I come nearer being decent towards people I meet. Unfortunately too much happens, as described below, that does not get within range of will control.

"Depression and Exaltation. Neither appears. Can enjoy living thoroughly, when I am not working.

"Fear. In '08 was afraid of my razor. Had to stop shaving. Nothing of the kind since then.

"Suspiciousness. Imagine I had it in strong form in

'08, but think not now, at least no more than normal for me.

"Emotional exaggeration, and reverberation of emotions. This was characteristic in the spring of '10, when I quit work and for some time afterwards. If I would think somebody, as my landlord, or some condition, was wrong, I would begin to fume inwardly; I could not shake off the preoccupation. I would have the sense of agitation in the body as well as the exaggerated emotion, and the reverberation might continue for hours. Have had a few beginnings of such experiences this fall, but nothing marked. Looking back at them they appear as the beginnings of what might have become fixed ideas. My specialized exaggerations never 'stick' this way. I easily free myself of them.

"Violence in word and movement. The worst symptom now. Restless or jerky movements of hands and feet. Spluttering talk and sounds that I haven't the slightest intention of producing. If I am crossed on trivial matters, but especially in arguments or reasoning, or kept in suspense, I become explosively irritable. As for instance smashing a chair on the floor, tearing up papers which I had to wait to have signed, hitting a waiter in the face with a bill of fare when he brought me the wrong dish. All of these things being done, as far as I can tell, without my being aware I was going to do them; but, of course, with sufficient habitual control to prevent very destructive acts as yet.

"Tendency to get things finished, so as not to be bothered with thinking I still have them to do. Plain feverish haste and insistence on being busy.

This is normal with me, but exaggerated now. Have not yet found the key to a low-toned life.

"Work. When in library work I become feverish at the start, but can settle down and retain good concentration for five or six hours unless definite physical conditions or some varieties of noises disturb me.

"Talkativeness. A recent phenomenon is nervous talkativeness under any and all conditions where normally I would be silent.

"Mischief. When I stop work it has been very difficult thus far to keep out of any variety of mischief that comes along. Such interference must therefore be assumed at each period described above when I have been supposed to be resting completely.

"Fatigue:

Many of the phenomena above described are closely comparable with what takes place on a smaller scale after physical fatigue; as, for instance, if I take an all day cross-country walk, have to entertain visitors in the evening and get insufficient sleep, I would feel and act next day much as I feel now all, or almost all, of the time.

"Exercise:

Usual recreation is long walks in the country. Of late years, however, rarely above twenty miles. Probably overdo in this under some weather conditions. Winters '08-'09 and '09-'10 have done regular gymnasium work."

Some of the patients modestly ask of me to accomplish for them a few things in one treatment: The following is a good type of many others:

"I realize a few of my greatest faults which I wish you to correct. You corrected my whiskey habit.

Now I wish you to help me along the following lines:

"(1) To continue to abhor whiskey.

(2) At all times to keep perfect control of my temper.

(3) To be enthusiastic in taking exercise in the open air and otherwise, and in playing golf, tennis and the like.

(4) To have even greater energy and application in my business, to be tireless and very exact in reading newspapers and other journals.

(5) To be quicker and more prolific in discovering hidden aspects of the news and the developments, and in producing feature articles and pictures having the elements of what is known as 'heart', or 'human interest'—that is, popular interest.

(6) To be to a greater degree capable of attracting the respect and confidence of superiors and inferiors.

(7) To be fluent—to a proper degree—in speech, and convincing, always retaining the command of my higher faculties.

Could you give these suggestions at one time? I can ill spare any time. . . . I am an easy subject." Patient is a newspaper man.

The psychopathic patient talks about his humanitarian ideals, about his great abilities superior to the common run of humanity, and how with his talents he is willing and has been willing to confer benefits on poor suffering humanity in spite of the fact that he has to struggle with his poor health, physical, nervous and mental. In spite of the overwhelming fatigue due to ill health, and in spite of the fearful ideas and impulses that have beset him day and night he still has succeeded to fight his way through. The patient hankers for notoriety, for praise, for appreciation by other people, and is apt to complain that the family, neighbors, acquaintances and even friends cannot appreciate his good points, his good will, and his high

ideals to which he conforms his life, tortured as it is with pains and suffering of poor health. The *egocentric* character of the psychopathic patient is bound up in his abnormally developed impulse of self-preservation and in his pathological state of the fear instinct.

Thus one patient opens his account with the phrase: "From boyhood I had a sensitive conscience."

Another patient writes: "As a child I had a keener instinct as to the real unexpressed attitude of those about me toward each other than the average child."

One of my patients, an extremely puny being of mediocre intelligence, writes: "I have always, from the earliest childhood, felt that I was different from those about me; and I must acknowledge that it was not alone a feeling of inferiority on account of poor control, but a feeling that I understood more than they. I was, however, of a delicate constitution and suffered from ill health."

The following is a characteristic report made by me about the condition of a psychopathic patient:

"He is not interested in anything but himself and in his business or money making for self-enrichment. Daily, when he is left to himself, I have to get a hold of him, and lead his mind away from his supposed troubles and financial affairs over which he worries. His central state, almost delusional in character, is fear of impoverishment. He is afraid he has only a hundred thousand dollars which will hardly suffice for his expenses. (The patient is sixty-five and has no children). His worry is based on fear of disapprobation and possible disparaging opinion of his friends and his acquaintances in regard to his failures in life. Being a lawyer, he was never appointed to any prominent position. He made little money in his investments. To this should be added the much lamented loss of his wife's health which might have given him room in the social

swim. Conceit, vanity, vain-glory, greed, ambition, grounded in a hyperæsthetic self-consciousness, associated with the fear of utter ruin, all go, as so many constituents, to form the patient's pathological, mental aggregate. I have tried to interest him in various other things than his petty self and its fears. I am sorry to say that thus far all my attempts have not been successful. The patient is too old, his life is too firmly rooted in the impulse of self-preservation with its accompanying fear instinct."

Here is a characteristic statement made to me by a psychopathic patient:

"Age 38. Apparently in good health except for a nasal and throat catarrh. Nose has been operated upon several times and a considerable part of the middle bone removed which before had obstructed the air passages. Less catarrhal trouble since operations. Perforation size of pea left between nostrils. Always had trouble with eyes until about four years ago when properly fitted with glasses for reading. Eye trouble caused by semi-paralysis of accommodation muscles. No eye trouble now. Suffer during the whole winter with cold hands and feet. Height 5-9½, weight 165. Now practicing law and have been engaged in like occupations last ten years, except one spent in mining. Mentally inclined toward philosophical studies. Fond of outdoor sports, trees, flowers, etc. No excesses at present. Worked too hard in early life on farm. Nervous temperament and extremely sensitive of others' opinions and words. Make too much of an attempt to satisfy the expectations of others. Have had several difficulties at various times with other men which resulted in considerable physical and mental compliments and honors paid to me. The parties were always much larger and used foul methods and as I am inclined to use kindly methods and much consideration for those

weaker or inferior to myself these difficulties have caused much mental worry and disturbance. Have attended a number of prize fights and always suffer extremely from increased heart action when I see them, or a personal encounter of any kind. Sleep lightly and often wake with a shudder though I have little recollection of any dreams. Find heavy drowsiness during waking hours. Unmarried. Would probably have been married years ago, if financially able.

"Always have an indefinable dread of something fearful going to happen. This is my greatest difficulty. I am too sensitive about taking issue with others. I have tried the real estate business, but this fear or dread has prevented me from approaching others for fear that they might take it as a personal affront, and in trying to be just I have been unjust to myself.

"There is no apparent reason why I should not accomplish much for myself and also do others good except this abnormal modesty and reluctance to oppose contrary wishes of others. I know I possess much latent force, if I can only bring it forth. In trying a case I have little difficulty. It is when matters must be taken up personally outside a formal court that I suffer. I feel a natural antagonism to some people and it is almost impossible for me to prevent myself opposing them on every occasion.

"I have felt for a long time that something not apparent on the surface was wrong. I feel that my strength will come only through some psychic cure which the ordinary physician passes over as superstition. I always believed that my eye trouble would be found to be out of the ordinary and, though some of the best specialists prescribed for me, it was a serious handicap until an experiment was made at my own suggestion, and I now have stronger eyes than the average man of my age, though several specialists

advised me to quit any work which required reading. My nose and throat are the causes of much trouble yet.

"I understand the theory of suggestion. I will purchase any books you direct and read them.

"The burden of my plaint is that I should be positive whereas I am negative."

A patient of mine, a clerk of average intelligence, with hardly any ability, but with plenty of selfishness, introspection, and immeasurable conceit, writes about his ideals in life:

"I would ask that this manuscript be considered in connection with my other two writings. I have already partially covered this ground in my autobiography. I should be glad to have my general outlook on life considered, and to receive suggestions relative to vocations and avocations, since my anxieties regarding these are inseparably intermingled with my thoughts of physical and mental health.

"Of course, since childhood my ideals have undergone a gradual modification. First, there was the religious motive of life: I wanted to be a soldier of the Cross and assist in the regeneration of souls and their preparation for the life beyond. . . I began to meditate upon ethical theories. . It appears that in doing the world's work the tendency is to specialize. . . . . In the matter of choosing my employment my own interest is identical with the interest of society. At different times of my life I have fancied I had a liking for one calling or another. . . My lines of thought have gradually drifted into the philosophical (patient means the various occult scribblings about 'health metaphysics'). I now ask myself why I should be a lawyer, a physician, a minister, a philanthropist or any other special thing? I conceive that a man's life is largely what circumstances make it, and it may be, therefore, that I shall always be a clerk in

an office, trying to be useful in a small way; but now we are talking of influencing such matters as far as we can by choice. I imagine that perhaps my field is in the line of ethics, philosophy, or whatever words may be used to signify the *general principles* governing human affairs. My reasons for thinking so are as follows: First, I feel a strong interest in those principles comparing to no other interest in my life. Second, I find very few people who seem to feel any such interest in such matters. Third, I believe such principles to be of supreme importance. The question is,—Is my position in regard to general truths so peculiar that I should regard it my mission to give those subjects more attention in study and expression than do other men?

"The question I want to settle is,—Do other men feel this same philosophical interest, realize the broad field of human obligation, and come down to special occupations, not because they are more interesting to them than the general field, but because they realize they must specialize in order to properly assist in carrying on the world's work? If this be so then I am mistaken in thinking I should give particular attention to general principles. But my observations have gone to show that the average physician, lawyer, merchant, or politician is not interested in the broad questions of life, but only in medicine, law, business, or politics caring little for the relation of his vocation to other vocations except as he makes his bread by it. Why then if the various departments of human activity must be correlated, and if the individuals making up those respective departments have no disposition to do the correlating,—should it not be done by those who are interested in the general field?"

It means that such work could be and should be done by the patient, by the philosophical clerk, interested in the general metaphysics of health.

Such confessions can be easily elicited from psychopathic patients even in their best moral states of apparent diffidence and humility. This paranoidal aspect of self-aggrandizment is present in all psychopathic cases. In some this trait stands out more clearly and distinctly than in others. It is, however, present in all psychopathic patients, if one observes them closely and attentively. It is the expression of an intensified state of the impulse of self-preservation and fear instinct. In other words, it is a state of an exaggerated, hypertrophied egotism.

"We must appeal to a law higher than the material law" a patient writes in his account. "I worried much over it. Since that time the relation of mind and matter greatly interested me. . . . My health at this time failed; I lost appetite and strength, had hysterical symptoms. I was treated for general neurasthenia. . . . . " Psychopathic, philosophical and ethical speculations and interests have their sole source in fear of sickness and self-preservation.

"One of my anxieties," another patient writes, "of my present life is connected with my business and my relationship to my partners. I am naturally conscientious and inclined to be not only earnest and sincere, but serious. My nature, instincts, and desires are not superficial. Yet my relation to the business is a superficial one. I am neither fitted by natural tastes nor by training for the indoor, rather mechanical, conventional, and routine processes upon which business and commercial success depends. . . . .

"Without the common motives of an ordinary merchant (greed) I am placed in the position of the one who lives not by the usual and conventional standards of right and wrong, but rather by a more exalted and a more rigid one of his own making which, unsupported by habit, and institutions, requires a greater

loyalty, a higher resolve, and a firmer will than is required of the conventional and conforming citizen. Emerson says it demands something Godlike in one who would essay such a task, not placing the same values on money, trade, commerce, and profit as the natural money maker and money lover, and not the opportunity to substitute and supplement the usual motives by and with the larger, and to me more compelling, of community betterment and employee welfare. . . . ."

Another patient writes of himself, "The hypersensitive nervous systems, with the initial shock has inhibited the development of my highest potentialities and my highest endeavors." He summarises his symptoms: "Dread and anxiety about being away from home and friends, self-consciousness, mental sluggishness, quick fatigue, inability for deep thought, general state of irritability."

One patient tells me that he suffers from fatigue, insomnia, dullness, inability of concentration of attention, failure in studies, slowness of comprehension, and so on; and yet he gives his opinion on every conceivable subject with papal infallibility, and hints at being an undeveloped, unappreciated genius.

Perhaps a few more of my cases will help one to realize the character and nature of the psychopathic diathesis:

M. A. Age 43, female, married. Sister and brother died of tuberculosis. When young, she herself had an attack of tuberculosis from which, however, she entirely recovered. This made her, from her very childhood, think of herself and of the fear of death. She is suffering from menstrual irregularities with scanty discharges. She also suffers from headaches, backaches, indigestion, intestinal pains, borborygmus, and eructations. Her mind is entirely engrossed with

herself, she is totally unable to think of anybody but herself. The whole world is for her sake, and she does not scruple to utilize anyone who is willing to serve her. She will take advantage of everybody and would not care what the feelings of others might be about her extreme selfishness. If she were sure that no fine or punishment would follow, she would not hesitate to take anything that belongs to others, no matter whether it be friend or enemy, provided it does her good, drives away any of her discomforts or fears of disease, or gives pleasure to her, even if the others were in agony on account of it. If there were a prize on selfishness, she would be sure to fetch it. She is sure to take advantage of people who do not know her and who practice the ordinary civilities and amenities of life in regard to her When the people refuse her demands she does not mind it, and goes to look for other victims who have as yet no knowledge of her temperament, character, and sickness. Everything is legitimate in order to get well and healthy.

The patient talks of high ideals and of service to humanity, and yet she has not hesitated to lure away a man who had a wife and three children. She made him divorce his wife, who was her bosom friend, had him marry herself. She spends all his money on her "artistic dresses," while his former wife, the mother of three children, and his little family are allowed enough to keep them from starvation. The patient goes around travelling, visits physicians, cures herself, keeps on being sick in various health resorts, learns all kinds of fads and their modes of healthy living, keeping away from diseases, wasting carelessly her husband's money.

The patient is in terror of disease and of old age. She is in fear even to think of such things. She carries around with her all kinds of prescriptions and directions

as to how to avoid disease and old age. Everything must be subservient to her impulse of self-preservation and instinct of fear. She has dwindled to a parasitic existence, obsessed with the lowest instincts of life. She avoids all responsibilities; all she wants is to use others as much as she can in order to obtain for herself the highest possible benefit. When she meets people who do not know her she is quick in taking advantage of them. Life to her has no duties, but rights. Patient is a typical parasite. She would cheerfully sacrifice a nation to get out a mite of pleasure, comfort, and health.

V. S. Age 49, female. Married; no children. She has three sisters and two brothers who are all well. As a child she lived in great poverty, she was neglected and met with accidents and scares; suffered from sickness until her little body was emaciated from privation. She managed, however, to go through school and became a clerk in a small store; she was very careful of her appearance which meant to her a good marriage, a comfortable life. She also took good care of her health which was rather precarious, on account of the many colds and painful menstrual periods, accompanied by severe headaches. At the same time on account of the poor life led, she also suffered from some obscure intestinal troubles, more specially from severe constipation, relieved by frequent and large enemas. After years of precarious health and quests for happiness, for marriage, she finally somehow succeeded in marrying a well-to-do merchant in whose store she had worked as clerk. Immediately after marriage she rigged up a "beautiful home with rich mahogany furniture" which even the husband regarded with a gasp, settled down to a life of leisure and complete idleness, and began to attend to her health.

The patient gradually began to find more and more troubles with her organs, from pelvis and intestines to the top of the head. Nothing was quite right. Things could be improved. As she went on the impulse of self-preservation gained more and more control over her. Along with this impulse the fear instinct gained in strength, became more and more extensive, she became a psychopathic sufferer.

The patient became full of fear which, by the principle of proliferation and diffusion, kept on growing and diffusing in ever new directions and spreading to ever new associations and systems. The central fear was poverty. Patient was afraid she might become poor. This is naturally a fear from her early childhood,—the fear of suffering in poverty, a fear which persisted throughout her life. The fear became accentuated and developed with time, it became intensified with the onset of menopause. She was afraid to spend money, especially sums above a five dollar bill. No matter how much she tried to reason with herself this fear persisted. She was afraid to buy new things which she regarded more or less expensive. She was afraid to put on new dresses, to buy new furniture, to spend money in any way. In fact, quite often the fear was so uncontrollable that even when she had no thought of threatening poverty, she was in a panic at being confronted with expensive purchases.

The fears then began to spread to other things, such as giving away small articles or loaning books, or presenting any things or objects that might be regarded as expensive and valuable. The fears spread to other activities of life that might prove of some importance and value.

Along with it she had fears of digestion and nutrition, nausea, vomiting, intestinal pains, rectal, tubal, and ovarian discomforts, and especially an inordinate

amount of eructation which she had when in a state of nervous excitement over things that did not run the way she planned.

The patient was as obstinate as a mule, though claiming that she was doing her best and trying everything in her power to coöperate. She was doing everything in her power to frustrate the physician's directions, claiming at the same time that she was doing her best, scrupulously following the doctor's directions. She claimed she was nice to people when she was nasty and offensive to everybody who in any way happened not to fall in with her whims and caprices. In fact, even those who went out of their way to please her and did everything in attending on her, and helping her in every way day and night, even those she treated with lack of consideration, even positive disdain and contempt. She was the incarnation of demoniacal obsession, the very type of psychopathic meanness and egotism.

Patient abused and dominated her husband by her sickness, troubles, fainting and crying spells, headaches, moans, and weeping. She made him do everything she pleased. In fact, she tyrannized over her husband, and still she kept on claiming she loved him, could not for a moment be without him, and that on account of her extreme devotion to him, her will was broken.

She was a regular termagant, a demon incarnate. She knew how to make a scene and put the blame on somebody else. It was enough for her to suspect what her friends wanted her to do, she was sure, out of sheer malice, to act the contrary. She was distrustful, spying on others, sneaky, and lying right and left without any scruples; and yet "no one was so mild, so ideal, so kind, so affectionate, so considerate, so calm as she was." She went around reciting poetry about ideals, health, and happiness. She even per-

suaded herself that she was very educated, that she was the best business woman, the best critic, appreciative of poetry and of art in general. A veritable Nero, an "egomaniac," devoid of all love and human sympathy, "she suffered so much, because she was so unusually altruistic." A coyote in her fear, a tigress in her rage, she claimed the gentleness of the dove and the innocence of the babe.

Patient's talk was but of self. Not for a moment could she fix her attention on anything else but herself, eating, drinking, sleeping, stools, and feelings. Nothing interested her but herself; she ran from any work, from any occupation, however brief the time might have been. She could, however, talk of herself, of her former achievements, of her moral, intellectual qualities by the hour and by the day. Even games did not interest her, nothing but self, self, and self. This was so evident that one of my patients noticed this characteristic trait and described her as "egomaniac."

Whenever one spoke of any great man she was sure to have her opinion of him, might have known him; she was at any rate superior to him. She could give her opinion on any conceivable subject in literature, economics, and politics. She was cunning as a savage, and treacherous as a wild brute, and yet she was to all appearances a veritable saint, full of suffering for the sins of humanity and for the faults of her husband who was "boyish and foolish, whom she had to manage," and whom she did control and handle with an iron rod.

There is no doubt, however, that she herself was driven by her intense, uncontrollable impulse of self-preservation and by the instinct of fear. What specially terrorized her was the slow but sure extension of the fear instinct to more and more objects and acts. The fear instinct kept on creeping on her, slowly

choking the life sources of her being. To call the patient "egomaniac" is a mild descriptive term, "tigress," "satan," "fiend," would be more appropriate appellations. In her terror of self-preservation she made hell for herself and for others; she is a fire-brand from hell, fanned by the furies of fear.

F. W. age 47; female; married; has no children. Patient claims to have been an invalid from childhood, at any rate she was of extremely delicate health; she always had to take care of her health, and had to go through all kinds of troubles and diseases, especially digestive and gastro-intestinal. At the age of eighteen she got married and then her family felicity began. She began to complain of all kinds of uterine troubles, more so after a miscarriage. The gynecologist humored her with all kinds of operations and treatments. The fear of disease became strengthened, and finally she cultivated a typical pathophobia; she was in terror of some fearful malady that might possibly take possession of her.

Patient wanted to have somebody near her, otherwise she could not stand it. This fear of remaining alone dated from childhood, when at the least discomfort, she asked and screamed in terror for help. A companion or nurse had to be with her day and night, so as to protect her from any impending evil.

Occasionally, to relieve her feelings, in the middle of a conversation, whether for the sake of impressing her family, her husband and her physicians with the gravity of her disease or as a vent for the rising instinct of fear, she emitted a scream, wild and weird in character, reminding one of the howling of a timber wolf, or of the wild whoop of an Indian. This was a habit she kept up from childhood. It was a reaction of her fears and a protection, inasmuch as it was a call for help which was sure to attract attention. The family could

not refuse help at hearing such an unearthly call. Later on it was consciously and unconsciously utilized by the patient as a rod to rule the family and especially her husband when the latter happened to become refractory. The fear reaction was thus used as a protection and as a weapon of offence.

Things had to run according to her pleasure or else she was put in a state of nervous excitement and fear with its awful yell of which the family and the husband were in perfect terror; they yielded unconditionally. The patient literally subjugated her husband by her spells of fear, especially by the fearful acoustic performance, the aura, the harbinger of a psychopathic attack.

The patient was always discontented and grumpy. Nothing could satisfy her, nothing was good enough for her. Everything and everybody were criticized. No matter how one tried for her she always found fault with the person. In fact the fault-finding was in proportion to the eagerness one tried to serve and oblige her. The nurses are not good, the servants intolerable, and people in general are bad, mean, stupid, and vulgar. She herself comes from an "old New England family, good blood,"—her grandfather was a fisherman and her father a petty tradesman in a small town. Patient makes great pretensions to education, poetry, art, and drawing. In reality patient is quite dull and ignorant, but unduly opinionated and infinitely conceited.

G. A. Female, age 63. Patient has been obsessed with pathophobia for over thirty-five years. She has been to a number of physicians and to many sanitariums, looking for health everywhere, not finding it anywhere. The fears date to her early childhood. She was regarded as a delicate child, the fear of disease was strongly impressed on her. She went through a number of children's diseases. Although she had a

number of sisters and brothers, the child's supposed delicate constitution was the fear and the worry of the parents. This fear was communicated to the child who for the rest of her life became a psychopathic patient with the characteristic developed impulse of self-preservation and intense fear of disease. She could not think of anybody but herself, everything had to be arranged for her, for her food, for her sleep, and for her rest. She kept on complaining at the slightest change either in herself, in others, or in the arrangements of the house, or in the weather. Everything had to be arranged just as she demanded, otherwise she was sick, or was going to become dangerously ill.

When about the age of thirty, she married a widower with two children. She trained the children to obey her commands implicitly, otherwise she resorted to the rod of sickness. The pathophobia, consciously or unconsciously, became a power which she yielded in the most tyrannical way. The children, when grown up, had to sacrifice themselves for the pleasure of the sick step-mother. They had to stay with her and minister to all her whims and fears. The very individuality of the children became almost obliterated by the persistent, egotistic tyranny of the sick old step-mother. She was like a regular vampire, sucking the life blood of her family.

It goes without saying that the same fear of disease tamed her husband over whom she ruled with an iron hand. The least opposition to her whims or her fears of possible disease made her so sick with all kinds of pains all over the body, and specially in the head and intestines that the family and the husband were driven into submission.

The woman was fat, obese as a hippopotamus, well nourished, with a florid complexion and with an appetite that would shame a Gargantua. The rarest,

the best, and the most appetizing dainties had to be on her table. She made of her meals a form of worship, requisite to propitiate the goddess of maladies. She did not hesitate to take the best morsels from the plates of her daughter and son, in order to satisfy her appetite which was supposed to be delicate and small.

Patient was conscious of every square inch in her body; she was afraid that some form of malady may lurk there. She was a typical pronounced case of pathophobia. Fear of disease and quest of health were ever in her mind. She could not talk or think of anything else, but herself and her symptoms. She made of her daughter a poor, colorless being, a day and night nurse, tyrannized her by pitiful whimpering.

When patient happened to wake during the night for ever so short a period of time, she did not hesitate to wake her daughter, tired as the latter was by her constant attendance on this psychopathic shrew. The daughter had to wake up everybody who could in any way bring comfort to that "poor, old, suffering invalid." After groaning, moaning, and bewailing her bitter lot the invalid took some medicine to appease the fear of disease, also partook of some nourishing food to keep up her strength and health, and went to sleep for the rest of the night.

As soon as the old lady found out that I wanted to send away her daughter and get a regular attendant to her, as soon as she suspected that she was not going to have her own way in my place, as soon as she scented danger, she sent for her son, whimpered before him, and without delay, decamped home.

The patient was many years ago under the care of Weir Mitchell who sent her to me as a last resort. Dr. Weir Mitchell characterized the patient as an "American humbug." As a matter of fact, the patient herself is really convinced that she is on the verge of

death, and is in terrible agony of her fears of disease, fears which make her quest for health a matter of life and death. She is not conscious of the fact that she is obsessed by the impulse of self-preservation with its accompanying fear instinct. The patient has become obsessed by parasitic egotism, the quintessence of psychopathic affections.

Many times during the day she paced the room reciting elevating passages from the Bible, from the great poets, Emerson being her favorite writer.

A man thirty-eight years old, married, highly sensitive, suffers from migraine, is irritable and restless. When about eight years old he wandered in the woods near his house. An Italian ran after him, flourishing a big knife. The boy ran away in terror. When he reached home, he dropped from exhaustion and fear. Once or twice, on account of the fear of sharp objects, he actually hurt himself when handling knives. This increased his terror and fixed his fear. The instinct of fear was still further developed and stimulated by a series of events, such as falling into a river, from which he was saved. He does not like to take baths, is afraid to enter water, especially a river, and is in terror of sharp objects, such as knives and razors.

Patient is extremely irritable, selfish. He insists on playing games which he likes much, irrespective of the pleasure of his friends and acquaintances. All he cares for is to have a good time, forget all his duties to his family. In his business he is exacting of others, although he himself is rather slovenly in his work, and slow in the performance of his obligations, but he is unreasonable with all his associates, and can not get along with them. He always insists on having his own way. Other people's rights do not trouble him provided his rights are care-

fully and scrupulously observed. He always demands services from others, especially from his friends. His mind is occupied with himself, with his health, his fears, and his ailments. The interest he takes in his friends and acquaintances is how far they may serve his purposes of pleasure, game, health, and avoidance of fear of disease. Even his own family is treated in the same way. His wife and child are regarded from the personal standpoint of his own good and evil, otherwise they are totally ignored. When they interfere with him or arouse his fears he becomes impatient, angry, and furious. He claims to be the most considerate, and kindest of men, brimful of ideals and humanitarian ideas. He thinks that he can accomplish more than any one else in his circumstances. Nothing is too good for him, nothing is superior to him. As a rule things are badly conducted, he finds fault with everybody and with everything. He is persecuted by the three psychopathic furies,—fear, egotism, and *ennui.*

CHAPTER XII

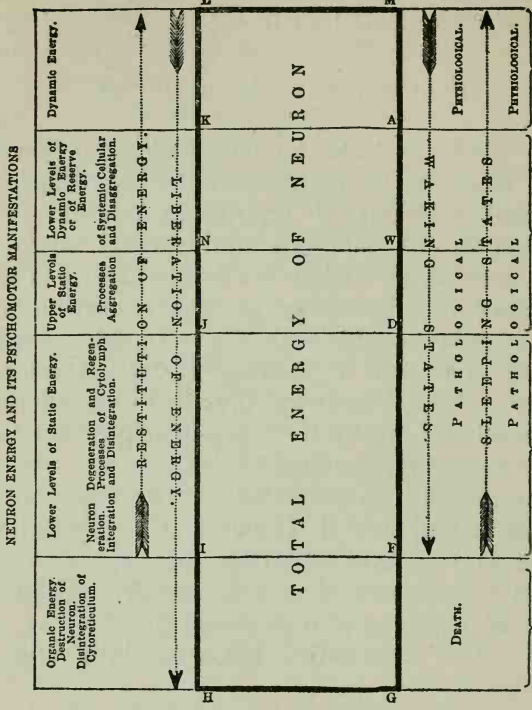
NEURON ENERGY AND NEUROSIS

IN my Work on "*The Symptomatology of Psychopathic Diseases*" I pointed out the importance of the various levels of Energy in relation to a classification of nervous and mental diseases. This same doctrine of various levels of energies is also of importance in the study of the causation and treatment of psychopathic maladies. To this we must also add the Principle of Reserve Energy, developed by Professor James and by myself independently. Perhaps a review of these principles will help the student to see the matter in a clear light.

The neuron may be regarded as the reservoir of energy, nervous and mental. The various manifestations of nervous and mental activities may, therefore, be regarded as fluctuations of neuron energy. We may fully agree with Sachs who proposed to term the cell an *energid*. This designation holds specially true of the neuron.

The total energy of the neuron may be classified into *dynamic* energy, *static* energy, and *organic* energy. The various nervous and mental diseases, classified by me into psychopathies, neuropathies, organopathies, may be correlated with the flow and ebb of neuron energy, with the physiological and pathological processes that take place in the neuron in the course of its activity and reactions to the stimuli of the external and internal environment.

The various portions of neuron energy in the adjustments to the environmental conditions may be represented by the following diagram:



Static energy is indicated by the diagram N W F I.

By *organic energy* is meant that energy contained in the very structure of the tissues of the neuron, not as yet decomposed into their inorganic constituents. This is indicated by diagram I F G H.

These phases of neuron energy are not different kinds of energy, in the sense of being distinct entities; they merely represent progressive phases or stages of the same process of neuron activity.

Liberation of neuron energy is correlative with *active* psychic and physical manifestations. Hence states of the nervous system corresponding to liberations of

energy are designated as *waking states. Restitution* of expended energy or *arrest* of liberation of neuron energy goes hand in hand with *passive* conditions of the nervous system; hence states of restitution or arrest of energy are termed collectively *sleeping states.*

The ascending arrow, indicating the process of restitution of energy, corresponds to the ascending arrow on the right, indicating the parallel psychomotor sleeping states. The descending arrows indicate physiological and pathological processes of liberation of energy, and also their concomitant psychomotor waking states.

"Ascending" and "descending" mean the rise and fall of the amount of neuron energy, taking the upper level of dynamic energy as the starting point. Briefly stated, *descent* means *liberation* of energy with its concomitant psychomotor, waking states. *Ascent* means *restitution* of energy with its parallel sleeping states.

The cycles in dynamic energy correspond to the physiological manifestations of the nervous system in the activity and rest of the individual in normal daily life. Concomitant with the expenditure of dynamic energy of the neurons, the individual passes through the active normal waking state, and, hand in hand with the restitution of this expended dynamic energy, he passes through the sleeping state of normal daily life.

When, however, in the expenditure of energy, the border line or margin, A K or N W, is crossed, dynamic and reserve energies are used up, and reserve and static energy are drawn upon. In crossing A K or N W the border line that separates the normal physiological from the abnormal or pathological psychomotor manifestations is stepped over.

"The thresholds of our psychological systems are usually raised, mental activity working in the course of

its development and growth of associative processes under ever-increasing inhibitions with ever-higher thresholds. . . . On account of the high thresholds and inhibitions, not the whole amount of the psycho-physiological energy, possessed by the system, is manifested; in fact, but a very small portion is displayed in response to stimuli coming from the habitual environment. What becomes of the rest of the unused energy? *It is stored, reserve energy.*

"Biologically regarded, we can well see the importance of such stored or reserve energy. In the struggle for existence the organism whose energies are economically used and well guarded against waste will meet with success in the process of survival of the fittest or will have good chances in the process of natural selection. The high thresholds and inhibitions will prevent hasty and harmful reactions, useless waste of energy, unnecessary fatigue, and states of helpless exhaustion. Moreover, natural selection will favor organisms with ever greater stores of reserve energy, which could be put forth under critical conditions of life. In fact, the higher the organization of the individual, the more varied and complex the external environment, the more valuable and even indispensable will such a store of reserve energy prove to be."

Static energy may be divided into two phases, according to the nature of the process of liberation of neuron energy. As long as the process of liberation of energy effects only a *dissociation of systems* of neurons the correlative psychomotor manifestations fall under the category of *psychopathies.* If, however, the process of liberation affects the neuron itself, bringing about a *disintegration* of its constituent parts compatible with restitution, the correlative psychomotor manifestations fall under the category of *neuropathies.* This process of disintegration, equivalent to cell degeneration may

end in death, in the dissolution of the neuron itself.

When the dynamic energy is used up in the course of life adaptations and the reserve energy is drawn upon, there may be the danger that the energy may be used until the static energy is reached and the neuropathic conditions are manifested. These conditions, however, are preceded by psychopathic disturbances which involve the associations of neurons. Associative life becomes disturbed, unbalanced, and emotional reactions become more violent and more frequent. On the one hand there is a reversion to lower forms of mental activity and lower instincts, especially to the impulse of self-preservation with the instinct of fear, and on the other hand the reactions of the emotions become more intense and pathological, since the governing action of intelligent self-control is absent.

In such cases, as I have pointed out in this and in my other works, the lower instincts, especially that of self-preservation and fear will prevail. The patient will be tortured by his selfish fears of protection of his individuality against the supposedly terrible dangers that threaten his life existence. The patient will then be obsessed by his fears and by his *wishes flowing out of his fear and deranged, intensified, uncontrollable impulse of self-preservation.* The fear instinct when reaching a certain intensity may give rise to functional pathological changes in glandular secretions, also in the metabolism of cytoplasm and nucleus of the neuron, and may finally bring about actual degenerative changes in the body of the neuron. One cannot help quoting Dr. Crile:

"Fear is born of the innumerable injuries which have been inflicted in the course of evolution. Fear, like trauma, may cause physiologic exhaustion of and morphologic changes in the brain-cells. The repre-

sentation of injury, which is fear, being elicited by phylogenetic association, may be prevented by the exclusion of the noci-association or by the adminstration of drugs like morphine and scopolamin, which so impair the associational functions of the brain-cells that immunity to fear is established. Animals whose natural defence is in muscular exertion, among which is man, may have their dischargeable nervous energy exhausted by fear alone, or by trauma alone, but most effectively by the combination of both.

"Under the dominance of fear or injury, however, the integration is most nearly absolute and probably every expenditure of nervous energy which is not required for efforts toward self-preservation is arrested; hence fear and injury drain the cup of energy to the dregs.

"Fear influences every organ and tissue; each organ or tissue is stimulated or inhibited according to its use or hindrance in the physical struggle for existence. . . The exhaustion following fear will be increased as the powerful stimulus of fear drains the cup of nervous energy, even though no visible action may result."

As the static energy is reached and with the lack of functional energy especially of the dynamic character, that kind which is habitually utilized in the ordinary relations of life, the patient will experience a monotony and a void in his life activity. He will have a feeling that something is wanting for his happiness; he will feel a craving for ever new stimulations, and will tear around for ever new impressions and excitements; he will be restless and ask for ever new amusements and distractions. He will do anything and everything to fill up this gap of his life, because life appears to him empty and devoid of all interest; he will talk of *ennui* and even of suicide, and will be of a pessimistic turn of mind, and as such will approach

closely to melancholic condition. He will crave for new pleasures and enjoyments, but will soon tire of them and ask for others. He will be in the condition of a leaking barrel, the more one pours into it the more is required to fill it.

The restlessness, this misery of craving for new pleasures and excitements to still the pangs of the fear instinct with its gnawing, agonizing anxiety, brings the patient to a state in which he is ready to drink and to use narcotics of all kinds of description. What the patient needs is some way of reaching his reserve energies and bring about an absorbing interest so as to take him out of the misery of monotony and *ennui* of life, save him from the listlessness and indifference into which he is apt to fall. Such a state of misery is to him unbearable. Something must be done to free himself from the depression of spirits and from the low level of energies and the self-fear instincts from which he suffers such agonies.

The constant craving for stimulation, this reaction to the anxiety of the morbid fear instinct, is the expression of the state of exhaustion of available dynamic energy for the purposes of life activity. The patient attempts to draw on his latent reserve energy; since this form of energy is not accessible to the stimulations of common life, he tries to release the energy by means of artificial stimuli, be it morphine, alcohol or by other stimuli of an excitatory character. The very craving for affection, sympathy, attraction of attention, love, and more especially love of a sexual character are all expressions of the same *tendency of endeavoring to stimulate to activity some sources of dynamic energy*. The low ebb of dynamic energy drives the individual to resorting to means by which he can whip himself into new forms of liberation of neuron energy. The impulse of self-preservation

drives the organism to the finding of new ways by which it can keep itself in existence. *The psychopathic patient is driven by fears, by fears of life and death. The very wishes of the psychopathic individual flow from the fears of self-preservation.*

What the psychopathic individual is unable to accomplish the physician has to do for him. The psychopathologist must make a close psychognosis of the case, he must learn all the factors that have brought about the present state, change accordingly the conditions of living, if this be possible; moderate the intensity of the impulse of self-preservation with its fear instinct; stimulate the patient to activity, and above all in various ways to liberate in the patient the locked-up sources of reserve energy. Once the sluices are opened the amount of energy coming is sufficient to drive away the psychopathic state.

In studying, by a close psychognosis, the various cases of psychopathic affections I wish especially to attract the student's attention to the fact that fatigue, whether physical, nervous, or mental, plays an important role in the condition of the patient. Again and again in giving account of his condition the patient will tell of the fact that in the case of fatigue, whether he thinks he experiences it or whether there is an actual state of it, that is, whether hallucinatory or real, the psychopathic symptoms come to the fore-ground in an ever more uncontrollable condition. "Extreme fatigue" says Mosso "whether intellectual or muscular, produces a change in our temper, causing us to become more irritable; it seems to consume our noblest qualities—those which distinguish the brain of civilized from that of savage man. When we are fatigued we can no longer govern ourselves, and our passions attain to such violence that we can no longer master them by

reason." Mosso gives an account of his own condition during states of fatigue.

"Education, which is wont to curb our reflex movements, slackens the reins and we seem to sink several degrees in social hierarchy. We lose the ability to bear intellectual work, the curiosity and the power of attention, which are the most important distinguishing characteristics of the superior races of man. Persons who suffer from affections of the nervous system are usually irascible. We see that hysteria is a condition of the nervous system comparable to that produced by fatigue." Mosso works with the ergograph in his study on the various states of fatigue--muscular, nervous and mental. "One of my colleagues who sometimes forgets the time, as he says, feels great weakness of vision after having given too long a lecture. This phenomenon appears especially at the beginning of summer, when the excessive heat affects his digestion. Any slight brain fatigue, particularly a lecture of an hour and a half, is then sufficient to obscure his sight so much that he cannot read. This asthenopia arises from exhaustion of the nervous system, and disappears a few hours after he has finished lecturing."

Fatigue or being easily fatigued is a trait of psychopathic affection. Almost without exception psychopathic patients complain that they cannot keep long their attention on anything, especially on subjects that require concentration and close intellectual activity. In such cases they complain that they get easily fatigued. In fact some patients as a matter of defence may suffer from *asthenopia.* They complain that on reading, if continued long, about an hour or more, specks begin to appear before the eyes; the field of vision becomes darkened, as if a cloud or mist hangs over them, the page begins to rock, the words move, everything begins to swim before the eyes, so that the

patients must quit their reading, or their work, such as knitting or crocheting.

The same holds true in the case of concentration of attention on a difficult subject that requires persistent effort of thought, or persistent muscular activity, even if the latter is not otherwise exhausting, as far as the physical side is concerned. Some patients when the disease is at its height cannot concentrate their attention even as much as five minutes. Their attention keeps roaming, and cannot remain on the same subject for any appreciable length of time.

The same holds true with motor activities, the patients are restless, they cannot sit for a couple of minutes in the same place, they cannot keep still in the same position; their limbs keep on wiggling all the time, their fingers keep on moving, beating tattoos, the muscles of the face keep on twitching or moving slightly. The energy is not banked up, it is not steady in its discharge, the reactions are not synthesized, they are not integrated. There is a sort of a constant leak of neuron and muscular energy in response to slight external and internal stimuli.

This condition is manifested by the consciousness of extreme fatigue at the least exertion, physical or mental, and also by the symptoms of fatigue on awakening. The patients sleep restlessly; sleep does not give them recuperation, they feel even more fatigued on awakening than on going to sleep. The patients cannot find any rest for themselves.

"However little attention" Mosso writes in another place "we may have given to the subject, we are all aware that after too long a walk, or after any violent exercise, such as gymnastics, fencing, or rowing, we are less fit for study. It is true that sometimes after moderate exercise intellectual work seems to become easier; this arises from the stimulating effect of muscular

work, which we shall have occasion later to consider at length. The best example of the incapacity for attention produced by muscular fatigue is given by Alpine ascents. Only with great difficulty could Saussure do a little intellectual work on Mont Blanc. 'When I wished to fix my attention for a few consecutive moments, I had to stop and take breath for two or three minutes.'

"In my own case I have observed that great muscular fatigue takes away all power of attention, and weakens the memory. I have made several ascents. I have once been on the summit of Monte Viso and twice on that of Monte Rosa, yet I do not remember anything of what I saw from those summits. My recollection of the incidents of the ascents becomes more and more dim in proportion to the height attained. It seems that the physical conditions of thought and memory become less favorable as the blood is poisoned by the products of fatigue, and the energy of the nervous system consumed. This is the more singular in my case, because I have a good memory for places.

"Several Alpinists whom I consulted agreed with me that the last part of an ascent was least distinctly remembered. Varracone, the barrister, well known for his daring ascents, one of the most distinguished writers belonging to the Italian Alpine Club, told me that he was obliged to take notes during an ascent, because on his return in the evening he remembered almost nothing. The following day, when the fatigue had passed off, many particulars recurred to his memory which he believed he had entirely forgotten.

"Pinel, the founder of modern psychiatry, who towards the end of the eighteenth century was Professor of Mental Diseases in Paris, showed that political revolutions profoundly affect the nervous system of a nation, and bring about an increase in the number of

the insane. The last civil war in America was a sad confirmation on a large scale of this statement, and important papers were published bearing on this point. Among others that of Professor Stokes deserves mention as containing very curious psychological documents.

"Sclerosis of the brain often results from prolonged emotion and cerebral overstrain. Just as a paralysis of the spinal cord may be produced by forced marches, so likewise may a paralysis of the nervous system be produced by cerebral exhaustion. I shall return to this later when I bring together for closer comparison the phenomena of muscular and those of nervous fatigue.

"Political men, with few exceptions, wear themselves out by overwork and age very rapidly. The correspondence of Cavour is full of allusions to the sleepless nights and the profound exhaustion both of body and of mind which his political campaigns cost him. Scarcely had the law abolishing religious corporations been passed (to quote a single example) when we find him writing to M. De la Rive: 'After a keen struggle, a struggle carried on in Parliament, in the salons, at Court and in the street, and rendered the more painful by a crowd of distressing circumstances, I find my intellectual powers exhausted, and have been forced to seek recuperation by several days' rest. Thanks to my natural elasticity, I shall soon be able to take up the burden of office once more, and before the end of the week I expect to have returned to my post.'

"In Cavour's letters a happy expression has struck me, which he uses several times to indicate a physiological conception, the necessity, namely, of rest after excessive mental work. He says that one must let the brain *lie fallow*, like a field which is allowed to rest, so that it may be sown again the next year.

"Another of our greatest politicians, whose life was

worn out by excessive work, was Quintino Sella. I was one of his friends, being bound to him no less by gratitude than by the great admiration which I had for him. In the last year of his life I was often with him, and was among the first summoned to his death-bed. I informed myself of the details of his last illness, and was convinced that he died from the effects of cerebral overstrain. He suffered from a prolonged and excessive fatigue which slowly destroyed his forces.

"Originally robust and endowed with great energy, he would fight to the very last, and in the effort overstepped the limit of possible recovery.

"I recollect that he made an appointment with me for seven o'clock in the morning, and for me who sleep well this was an unwonted hour in winter. But in the evening after dinner even he was fatigued, and being overcome with sleep could not maintain the conversation. How different he was in those last years from the time I first knew him on the Alps or in the discussions at the *Lincei*. His will, his energy, his political skill, were exhausted, and we regarded him anxiously feeling great uneasiness about him.

"I have questioned several of my friends who have held office in the Government upon the subject of overstrain. One of them writes to me that he experienced the greatest fatigue when he had to give audience. When he had to receive numerous visitors in the evening, tired as he was with the day's work, and to cudgel his memory for forgotten details, the effort became insupportable. For the sake of exactitude I quote a portion of his own letter: 'In a few months my hair turned from black to white. I have often experienced a regular pain in my brain, quite different from the neuralgia from which I sometimes suffer. This was a dull, aching pain, an uncomfortable sense of weight, which I attributed to actual cerebral

exhaustion. The culminating symptom was insomnia, or a restless sleep in which I uttered such groans that my wife frequently awakened me believing that I was ill. My stomach was atonic, all trace of appetite gone, and sexual desire suppressed.'

"I begged another of my friends, who was a Minister for several years, to give me some notes on the state of his health during a protracted and very lively contest which he had to carry on in Parliament in the defence of one of his bills. Here is his reply: 'My character was much altered. I suffered from an extraordinary degree of nervous excitability. Usually good-natured and affectionate in my family life, I became taciturn and extremely irritable; and perhaps things would have gone from bad to worse had not my friends, urged thereto by my family, constrained me to leave my work and go off to the country. I was getting no good from my food, though my muscular energy had not decreased, save that in the evening I felt as if I could not move from my seat. My sight was much affected, and I suffered from sudden nervous twitches.'

"These notes are of the more importance in our study of the effects of great and continuous work, in that their writer is a man of great capacity and energy who attained to power in the prime of life, when he was already inured to Parliamentary contests.

"For other evidence regarding overpressure among politicians, I have been indebted to the kindness of some of my colleagues, who have tried to attend patients of this class.

"Affections of the heart and neurasthenia become very common among those members who take part in the Parliamentary debates. I shall record some facts regarding them which have been made known to me by their physicians.

"There is one very energetic member who succumbs from time to time to cerebral fatigue, and is forced to call in medical aid. In his case the first symptoms are insomnia and headache, but these are not sufficient to arrest him in the rush of his political engagements. He perceives that he is exhausted only when at the end of a sitting of the House he cannot recall what has been said at the beginning. He is then terrified and dejected, because he finds himself out of the fight. Sleep is of little use to him, for he dreams continually of the debates and of political affairs. This is one of the most serious symptoms of cerebral overstrain. When our day's occupations pursue us in our dreams and we feel insufficiently rested in the morning, there is no need to consult a doctor; we must take a holiday or greater evils will follow.

"Another member, after having undergone great fatigue at the House, was attacked by palpitation at an official banquet where he had to propose a toast, and was forced to limit his speech to a few words. From that day he had frequent attacks of palpitation, and suffered from nausea when he was obliged to work at his desk. He was troubled with insomnia, and had remarkable fits of trembling in his legs and hands, more especially when he appeared in public. Sometimes when he was making a speech this trembling became so noticeable that he had to sit down. The smallest indiscretion in diet was followed by diarrhea lasting for two or three days.

"All these phenomena are the more characteristic of overpressure in that the man in question possessed a good constitution with no unfavorable hereditary predispositions, and always enjoyed good health before entering political life. He complained to his medical adviser that he had become irritable; and being naturally of a good-natured and pacific disposition,

he felt every outburst of anger as a profound humiliation."

An important feature in the symptom-complex of psychopathic diseases is the fact that the patients, after fatigue, feel worse, as far as their general symptoms are concerned, more depressed, the fears come to the surface with great intensity, and often become uncontrollable. In cases where the patient gets control over his fears, the onset of fatigue brings about the recurrent states of the fear instinct in their full emotional vigor. A patient, a physician, writes to me: "The prevailing symptoms are dread, fear and anxiety about travel and being away from home, mental sluggishness, quick fatigue and inability for concentrated thought."

Another patient, a physician of a good deal of experience, in consulting me about his psychopathic state of fears which he has been trying to control for a couple of years, finds that the fears become uncontrollable and overwhelming with the onset of fatigue. Whenever he gets very tired, especially when working in the laboratory and the clinic for many hours on a work that has to be completed, he finds that he begins to suffer from insomnia; along with it the fears rise to the surface of consciousness with an intensity that is almost horrifying.

Later on this state of fears, this arousal of the fear instinct begins to recur more and more easily, the fatigue state keeps on recurring with greater ease and at shorter intervals. The patient finds that fatigue, especially emotional and intellectual, requiring concentration of attention, and worry over the outcome of the work invariably bring about the onset or recurrence of the fears in their full intensity. The result in the physician's case was the usual one, the patient formed an intense fear of fatigue, a *fatigue-fear*.

Fatigue-fear is quite common with psychopathic patients. A vicious circle is formed. The fear instinct by its continuous action and arousal of the wearisome and exciting emotion of fear produces fatigue, and conversely fatigue helps to produce a more intense condition of the fear instinct and the impulse of self-preservation. The patient is afraid that overfatigue might injure him and might give rise to a worse state of health or disease. Finally there is formed the fear of doing any thing, the fear of fatigue, the searching after composure and euphoria, the restless hunting after rest.

In the treatment of psychopathic diseases the physician must take this condition into account. A few cases will best bring out this point of "fear fatigue."

"My early fears were such as are common to children. I feared the dark and was very fearful when sleeping in a room by myself. As a boy I was very timid and bashful.

"At the age of eight to twelve I remember thinking that my mother might die. My mother was in poor health at the time, having suffered a nervous breakdown at the death of my father.

"At the age of ten or twelve there came into my life something to be noted perhaps as a neurasthenic symptom. At this time I gradually became possessed of a fear; I was afraid to leave home, that is, to get away from my own home and home people. This grew upon me to such an extent as to make life very miserable, for, to leave home and home people even for a day, I thought I was going to die. I would become faint and turn pale.

"This fear kept me at home a great deal during this period, for I would not leave home unless accompanied by some of my people. Finally I decided to conquer this thing or die in the attempt. So one day I left

home alone to attend a carnival in a neighboring town. This fearful dread was constantly with me and as I would think about it I would become weak and faint. Nervous waves of apprehension and fear would pass over me, and I would feel as if I were sinking. At one time during the day I became very faint, turned pale and was sick. I tried to drink something cold, but this made me more sick. I found a place to sit down and this spell passed off.

"Having conquered this, I began to outgrow this fear, so that from that day on it gradually wore away until I had no fear whatsoever of leaving home.

"As I grew out of the boyhood stage into my 'teens I was quite ambitious and entered rather vigorously into work at an early age. I worked hard on the farm during the summer and attended school during the winter.

"As I grew out of the 'teens I came to have periods of great mental depression and that often without any cause. These depressions, beginning at about the age of eighteen, grew upon me as I became older. At length they would affect me so as to incapacitate me for work, and while under this mental depression would be able to work only through great effort of will.

"At various times during my life, some matter of minor importance, such as some trouble or difficulty, would become fixed upon my mind and I would seemingly be unable to throw it off. This would throw me in a depression and I would feel tired out and without ambition until things gradually wore off.

"One night I awoke out of troubled sleep with a fearful start and thought I was going crazy. The tortures I suffered for the next half hour are well nigh indescribable. The next day I was in a highly nervous state and had great fears that I would go insane. This

shock finally wore off somewhat, and I did not consult a physician as I think I should have done.

"I continued with my college work as I was attending college at this time, but I continued to suffer the torments of the damned and had constant fears, was very much depressed and always tired out.

"This was about Easter time, 1911 and during my Easter vacation I took a trip away from home, hoping that the change would relieve my mind of the fearful state in which it was in. I came back none the better for my trip.

"I now went back to my college work and finished the year in this wretched state. Now, with vacation on and the cause of my trouble entirely removed, I thought I should improve, but instead continued to remain in this miserable state of mind, extreme lassitude, and a morbid mental depression almost all the time. Occasionally my spirits would rise for a time and I would think I was improving, but this was only temporary or spasmodic and would last for a few hours or a day or two, when I would again sink into the usual state of depression.

"I now consulted a physician who said I had had a nervous breakdown and that with proper rest I would regain my strength and be well again as usual.

"Upon this advice I remained at home during the summer, doing only what I wanted to about the house. I did not gain, however, during the summer.

"During the summer I was out camping for a week, where, under the influence of congenial young people, I lost sight of my troubles and gained wonderfully both in strength of mind and body. This improvement took place within one week and at the end of that time I went home a new man.

"In September, 1911, I went to southwestern Virginia where I had the promise of work and where I thought

the change would improve my condition. In October, 1911, I began work with the C. C. Co., Bristol, Va., but soon found myself so incompetent to do the work, and the work caused such a strain and suffering on my part that I dropped it for a time, and, after consulting a local physician, went up into the mountains of East Tennessee. Here I spent ten days or two weeks tramping around the mountains and eating heartily. The change of environment and climate seemed to work no improvement in my condition.

"I came back to Bristol and took up my work again, but had to give it up soon, because of the fearful strain under which I worked. However, as I did not gain at all during the period of idleness I resolved to go to work again if it killed me. So I went to work on December 11, and continued until August, 1912.

"In December I began treatment with an osteopathic physician and continued for four months. He did nothing for me whatsoever, but take my money.

"During the eight months I was working, I observed every possible chance for my improvement, took physical culture exercises, cold plunge every morning, studied my diet till I was relieved of constipation, but in spite of all this I gradually lost flesh until by August 1, I had lost twenty pounds and was so weak at times that I could hardly move.

"I was returning to my home in Vermont in August, to recuperate, and I stopped in Washington, D. C., to consult Dr. W. He advised me to return home and spend six weeks in recuperating, and if at the end of that time I was not improved I could return to him for treatment, or he would refer me to some one in New England, or Boston.

"Following Dr. W.'s advice I returned home and availed myself of every possible opportunity to have a good time. But at no time did I have a rise of spirits

or any feeling of well-being whatsoever. I began to eat well and sleep well, but there was no change in the condition of mental depression or extreme lassitude. My strength and weight increased somewhat, but not enough to make any perceptible difference.

"On October 4, I began treatment with Dr. Sidis. For the first four days I did not improve at all; in fact, I was more despondent than usual and very nervous at times, which was the result of the change in conditions and certain anxieties and fears which the new undertaking caused me.

"On the 18th, there was a marked improvement in my condition. I rose with the usual depression, took a cold plunge, went outdoors, and, as I was walking about the house, began to feel better. This good feeling came on quite rapidly and continued throughout the day. This improvement seemed to be principally in the mental condition, an uplifting of the great depression, freedom from cares and anxieties, and also a general return of strength and powers. This improvement was general throughout the week. During this week I felt very much improved and would talk freely with the boys, and the world began to look different to me. However, I was not confident that this condition was permanent, I feared that I might go back at any time. I would be very tired when night came, but without the usual depression. At times as I was thinking about myself it would seem as if I would relapse at once into the former condition, and only by great will-power could I throw this off and stop thinking about it until this feeling would pass away. As the week passed I outgrew these fears of a sudden relapse, and it seemed as if the improvement had come to be permanent.

"The cure began to go down slowly and gradually; and without any cause that I can ascribe to, I lost hold

of the improvement I had gained. That is, by degrees I returned to the lowered condition in which I was previous to October 18. I had fully relapsed to the condition in which I could not seem to go lower."

After six months' of hypnoidal treatment, disintegration of fear system, well balanced and careful control of work and rest and nutrition, the patient gained forty-five pounds, and returned home well; has stayed well for three years and is doing work.

"My earliest recollection," one of my patients writes in a final account, "of having any mental or nervous trouble begins at fourteen. Primary cause of disease (if cause be mental) became operative at twelve, for then I learned of the habit of masturbation but was deterred from indulging at first except very infrequently, by a terrifying idea that it was not right, and a few months later by reading a booklet about electric belts telling of the terrible effects of the habit on the mind and the nervous system. I began to do a man's work at twelve, was large for my age, so the thirteen or fourteen hours of work a day might have done me harm. Was practically full-grown at sixteen. At fourteen the habit of self-abuse got firm hold on me. Practiced vice almost every other day. Fear of harmful results undiminished, but a foolish idea that through preventing loss of semen (i.e., I thought it was prevented) by pressure on the urethra would make habit almost harmless. This idea let the habit get strongly fixed. Ignorance of physiology self-evident. Practiced habit till sixteen, at same time, almost daily, read advertisements in newspapers by quack specialists for 'Diseases of Men' which gave various symptoms of lost manhood resulting from masturbation and other causes.

"Among the symptoms which impressed themselves strongly on my mind and which I thought I had and were being caused by my habit were: lack of energy,

loss of memory, lack of self-confidence, fatigue, inability to concentrate mind, weakness and lassitude, and a long train of similar ones. At the end of fifteenth year during a hot and strenuous harvest at driving a binder, and immediately afterwards, distinctly remember being very cross, irritable, tired, and easily depressed, and then occurred on one occasion what seemed a strange loss of memory: I could not remember the names of three of our hired men after an absence of a month. Shortly after I became sixteen, I became so convinced of and frightened by the harm I thought masturbation was doing me that I broke it off abruptly, and practiced it only at long intervals of several months. I thought I had done myself great harm. My mind seemed to be in particularly bad condition and I felt a lack of energy physically. My mental weakness and physical condition caused me so much alarm that I wrote to a quack specialist for diseases of men. He answered that I had nervousness, sexual weakness, lack of erectile power (I thought this symptom particularly indicative of great harm), weak kidneys, etc. Had no money so could not take his treatment. His letter gave me the first impression that I was nervous. Prior to that I had no definite idea of the nature of my disease and even then didn't know what nervousness meant and didn't associate it with exhaustion, although I really was easily fatigued. In my first letter to the quack I wrote that I had syphilis, thinking that because my hair was falling out badly I had that disease, so great was my ignorance.

"About this time I bought an old family doctor book which told of the terrible effects of self-abuse, and that nervousness was almost incurable. At about the middle of the sixteenth year I thought I had been seen in the act of masturbating (I probably was seen) by one of our hired men. Believing he would tell the whole

neighborhood about it, I was seized with a profound spell of mental depression. I overpowered the fellow one night (he was not big and I, even at sixteen, was over six feet tall and quite muscular) threatened his life, but he denied telling or knowing about my habit. Swore him to secrecy. Some of his acquaintances would look at me with a queer smile and I was quite certain that he told.

"For several months afterwards I was troubled with profound mental depression and weakness. After I became seventeen, I decided to go to a normal school in a neighboring town. I graduated from common school at fifteen, but had to work the next winter. Father took me to the normal school, arranged everything, and then left me there alone. The idea of going to school gave me much pleasure, but this with the unusual sights and sounds I had seen and heard during the day (the town was a much larger one than I had ever been in before) had the effect of so exciting me that I could not sleep that night. I went to school the next day not worried about this loss of sleep and was enrolled in all my classes. Tried to study in the evening, but found my mind confused, my memory bad, and my old depression was still there.

"I was unable to sleep the next two nights so I went home and consulted a physician. Told him I had insomnia. The physician said my trouble was mental, but I could not understand or believe it. I went to school for a week, but complete insomnia drove me home. The physician, on my first visit, said I had been reading a whole lot of quack literature on sexual matters and that that had done me harm. Partial insomnia followed for two months and then restful sleep came with the use of a new compound of drugs. With the use of an electric belt and the hard spring work the insomnia disappeared the next month.

"In the fall when hard work was over the fear that the insomnia would return took hold of me. The insomnia did return, and the strongest sedatives that two different physicians could give me failed to make me sleep for three weeks. Both physicians said the trouble was mental, and I was now told that drugs would do me no good. I resigned myself to death or insanity. I took to religion, stopped worrying, and sleep came in a week. My physician told me again and again that the trouble was mental, but I thought it was from a shattered nervous system caused by self-abuse. The insomnia was much less severe during the late fall and winter of my eighteenth year. During most of my nineteenth year could only sleep six and a half or seven hours in spite of hard work. This worried me and I felt exhausted and feared that my health was being ruined.

"All these years, whether I had slept well or not, I still had the same old physical fatigue, melancholia, and mental weakness. At eighteen began to read New Thought literature and to get vague ideas of the subconscious mind, suggestion, psychotherapeutics; with them came more of a belief in mental methods, but still the idea haunted me that self-abuse had caused my condition. When nearly twenty, decided to take mental treatment from a pretended authority in psychotherapeutics at Chicago. He wanted to give me 'absent treatment.' The local physician advised me against it and told me to go to school and to mix with the young people as much as possible. I went to school, only took two or three subjects, and though I slept six or seven hours (often more), thought I had insomnia, worried about it, felt terribly weak, mentally and physically, went home at end of term thoroughly exhausted, so I thought and felt. During these last two years read a great deal of drugless healing and

physical culture literature, thus formed a strong prejudice against drugs and a firm belief in the so-called natural methods of healing. The last-mentioned physician had also said my disease was mental. However, I didn't think he knew anything about psychotherapy. I now wrote to the (to me eminent) psychotherapist of Chicago. He answered that I was a neurasthenic of the truest type.

"I began to sleep better immediately, thought him a great authority, and tried to follow his advice to the letter. Followed his advice very closely in spite of many ups and downs, much more faithfully than I ever followed yours, shameful as it is to admit it. I still had all my old symptoms, except that of insomnia. I got discouraged with him and quit him. I ought to mention here that since I was thirteen I never had a friend and never went visiting, except to a few dances which I did by the advice of my quack doctor who tried to get me to cultivate my social faculties. I was discouraged for about a month, then got new faith in the regime I had been following, added some nature cure and New Thought ideas to it and still hoped for success.

"I went to school the following winter with the resolution to succeed or die. Slept little the first week, but for the four following months slept well in spite of considerable study. Study, I used to think, would cure insomnia. In the fourth month of my stay at school, I took two extra subjects and cut my sleep to seven hours. I was obliged to study unusually hard to get my work done. I had always had spells of depression without apparent cause, but during this fourth month a sense of exhaustion gradually developed in me, and I seemed to be losing ground in my studies. After a month and a half of this new regime insomnia came on, from fatigue and seemingly not at all from

anxiety about sleep. *I was soon completely prostrated by fatigue and insomnia* (the insomnia now becoming formidable again: five or six hours of sleep) so that I couldn't study, managed to stay till end of term, a period of a month and a half in this condition. I consulted Dr. A., who said that my trouble was probably physical, and that I needed a great deal of sleep.

"I had put my whole heart and soul into psychotherapeutic methods of cure for nearly two years and it had apparently ended in complete failure. Dr. A's opinion that my disease was physical settled the matter in my mind. I was convinced I needed rest, sleep, and proper nourishment. Dr. Mitchell's 'rest cure' was what appealed to me, but Dr. A., would have me go to Boston and consult nerve specialists. I went to Boston, consulted Dr. P., who questioned me, tried my reflexes, and said I had a strong physique and a 'great heart.' He said my disease was caused by subconscious ideas, and that I had to work, because people in my condition always get worse with rest. He sent me to you. I feared that Dr. P. and you had told me my disease was mental just for suggestive effect, and that my disease might be physical to a considerable extent.

"Came to Boston and went to work. The work was not hard, but the fatigue was terrible and by the end of the sixth month seemed to have grown unbearable. In the evenings after work it was so great I couldn't talk.

"The idea that 'rest cure' might have been better for me was in my mind at your Institute and also during the first six months in Boston.

"Sleep came a week later. Highly enthusiastic about this achievement. Resolved to go to school. Fatigue disappeared for several weeks during period of elation. Should say that the above work was first I had done

away from home, and was naturally worried under a very cross employer. I consulted you again, you advised me to go to school. I went to school about a month without dropping my other work (I took only two subjects), but at the end of that period I had to drop manual labor from overpowering sense of mental weakness and physical fatigue. I got through first term with much difficulty. By this time I began to make friends. I got through second term with less difficulty and more social experience. At beginning of third term I got insomnia from a fatigue which had been gradually growing to a terrifying degree.

"Two visits to you at Portsmouth made me feel highly elated for about two months. My fears and worries may be reduced to one, and that is '*Fatigue.*' I am not worried about sleep at present, but there is still the haunting idea that hard study with little physical exercise would cause it. I am mentally and physically fatigued most of the time and yet the amount of work I do is ridiculously small. I don't accomplish anything and don't see how I can ever make a living, if I don't get rid of the fatigue. Depression accompanies the fatigue, if the latter is at all severe, and makes everything look black. Your statement at my last visit that my fatigue was caused by my fear of it and constantly thinking of it, struck me with great force. It seems so very reasonable, and appeals to me so strongly that it bids fair to do me great good. After re-reading this whole account my disease seems to be a ridiculous matter made up of stupidity and foolish fears."

F. E. C., Female, unmarried, forty-three years old.

"I have practiced in P. for a few years. Previously a teacher.

"I have had no illnesses, except several attacks of intestinal impaction. There is no organic trouble.

"Life has been active and full of interests, with more duties and pleasure than I had time for. The only discomfort I have had was a weariness. I enjoy work and have taken a keen interest in life until lately, when I developed a distaste for everything.

"The physical symptoms began in the summer of 1912. I was very tired, but took no vacation except week-end trips at the beach from Friday to Monday. I noticed it was difficult to carry a light suit-case; no grip in hands or strength in arms. One day I hurried to catch a street-car and started to step on. My legs seemed to give away and I fell, striking my head on the pavement. Since then, at times, I have had a fear of getting on cars, and for many months before I stopped work, only a resolute determination not to give way to fear kept me using the public vehicles. I could not lift my foot to the first step, or, having accomplished that, I could not pull myself up without help. The moment I tried to step up I became a dead-weight.

"You will understand that I can give you no adequate description of the distress and humiliation I suffered. I lived in dread of the hour coming when I had to get on a car, or into an auto to go home from the office. I thought it was a mental state that I should not yield to, and so I kept up the fight till May, 1914.

"During the winter of 1913-14 I realized that my work was deteriorating; my fingers and wrist lacked power to do the mechanical part of my work, but, worse than that, my mind was acting mechanically; I lacked enthusiasm and I was tired all the time, but as great fatigue was a condition that had been present most of my adult life, I paid no attention to it. This seemed a condition of deadness; there was nothing I wanted to do, nowhere I wanted to go, and no one I wanted to see.

"If I had had a desire for anything but work I think

I should have taken a vacation sooner. In May I decided to leave the office for the summer. Just then I took a severe cold—"grippy"—which prostrated me. My left eyelid drooped, and I lost control of it and of my throat and tongue. My voice sounded, as if my mouth were full, and I had great difficulty in swallowing. These symptoms disappear for a time, but return with the least over-exertion or strain. The last six weeks they have been acute.

"As soon as I was able to travel I went to the beach for six weeks alone among strangers. I had trouble in dressing myself, cutting meat, and in all the little finger and wrist movements, but I improved in health and prided myself on my ability to get on a car without help when I came home. I returned, because my sister was very ill. It was weeks before she felt sure she would live, and the strain of that time was too great for me.

"I felt unnerved and unequal to business or social life. The only thing I seemed to want was cold weather. I felt so utterly tired of the monotony of life in C.

"In November, mother and I came to a farm in N. to spend the winter with my sister and her family. The trip was wearing, and I stayed in bed for a month after reaching here. I was benefited by the rest, and enjoyed the crisp, cold air that poured down across the bed from two open windows.

"The winter has been severe—fifty-seven inches of snow—and it has kept me in. I like cold and I wanted to get out, but when I tried to walk on the shovelled paths in the snow, I found myself unexpectedly sitting in a snowbank with no ability to get up, and no knowledge of why I should have fallen. I seemed paralyzed by the cold. February, March, and April have been raw, gloomy, depressing months, and I have failed steadily in flesh, strength, and control.

"My legs act like wooden pegs, and I am not always sure of crossing a room without giving way. My jaw won't work well enough to masticate solid food. Some times my neck feels as if it would break like a brittle stick, if I tried to make it hold my head longer. Throat won't swallow, eyes won't focus alike, eyelid droops, arm can't lift a spoon to my mouth at times. All these symptoms disappear, if I take a spoonful of brandy.

"My temperature is subnormal, about 95 in morning, and my pulse can hardly be felt. Reflexes normal, perhaps slightly exaggerated. Muscles atonic. I sleep well, sometimes without waking for nine hours.

"I feel full of ambition and plans while I am lying down, but I 'wobble,' and terror fills my soul when I have to stand, or walk, or meet new people, and particularly take a step up or down.

"Menstruation has always been regular, normal, and free, until and including February 20, 1915. I have not menstruated since. I am told that the pelvic organs are normal, no enlargement, and no atrophy.

"My lung capacity is great, my digestion fairly good, constipation is habitual. No pain, except neuralgic twinges.

"If I take strychnia in 1-100 gr. doses three times a day and brandy before meals, I manage to eat and walk, but depending on stimulants does not seem to me to be good practice. I have had that treatment this last week only.

"While at the beach for a month I recorded my dreams as carefully and accurately as I could. With that as a basis I submitted to an exhaustive quizzing over all my past life. No experience, no emotion of any kind, no conscious desire was concealed, but the cause of this condition was not revealed as far as the physician could determine.

"For the last five years I have lived under great

strain. Added to the pressure of financial difficulties, was the strain of much sickness in the family. My mother twice had slight cerebral hemorrhages, an invalid sister with a slow-growing cancer of abdomen caused me much anxiety and distress. There was also a case of tuberculosis, and it seemed that I was never free from care of the sick,—never any relaxation at home.

"I have given you as complete a history as I know myself. I am weary of carrying the responsibility of the care of myself. I should be glad to be told what to do, and made to do it."

The cases and accounts cited bring out clearly the relation of fatigue, fear, and psychopathic states.

Mosso studied the state of professors and lecturers shortly before and after the delivery of lectures. He found that there was excitement which was betrayed in the curves of the ergograph, the sphygmograph, and the curve of blood pressure. "The bladder and the intestine betrayed the internal agitation;" Mosso might have added glandular secretions as shown by Pavlow and his school. More hormones from thyroid, parathoroid, from suprarenal and other glands and organs, associated with emotions, especially with that of fear are, with various chemical modifications of functions, discharged into the blood, and brought to various organs thus effecting serious changes of function.

"Dr. Salvioli" Mosso goes on to say "told me that his appetite before lecturing was not as good as usual. I have seen very able orators, famous professors, find themselves upset at the prospect of reading a printed discourse. I remember an electoral banquet at which one of the best known deputies in the Italian Chamber neither ate nor drank till he had run through the speech which he was to read to his electors, and of which he

had the proof in his pocket; and I was told that such was always his custom. With all the admiration I feel for the courage with which he beards his opponents in the Chamber, I cannot help smiling when I read the reports of his fiery interruptions and recall the fear which he experiences in presence of the electors."

Here too it is the intensity of the impulse of self-preservation with fear of failure that has brought about the temporary state of psychopathic affection. The overwhelming power of the herd, of the community, the overpowering sense of social force, and the loss of individuality in the mob are especially conducive to the awakening of the fear instinct and to the arousal of the impulse of self-preservation. Social disapprobation terrorizes gregarious man. There is no fear greater than social panic. I pointed this out in my work on social psychology in studying the action of the mob on the consciousness of gregarious man. A good number of the fears presented in psychopathic cases are often of a social, gregarious character.

No instinct works with such fatal effects as does the fear instinct among social animals. In a herd, in a crowd, in a mob the fear instinct produces the most dangerous results. In my "*Psychology of Suggestion*" I established the important law that it is the uncritical, subconscious self or subconsciousness that is subject to suggestions with consequent fatal impulsive actions. The law, as supplementary to and corollary of the first law, is that impulsive, reflex actions are controlled by the critical, personal self. Another important law established by me in the same work is that the *emotional excitement of a social aggregate grows in a geometrical progression.* Professor Giddings in discussing the laws of social action adopts these laws. "There are three of these laws" he says "that may be regarded as demonstrated: Impulsive social action is commenced

by those elements of the population that are least self-controlled. . . . The law of the extent and intensity of impulsive social action is as follow: Impulsive social action tends to extend and to intensify in geometrical progression. . . . The law of restraint of impulsive social action is: Impulsive social action varies with the habit of attaining ends by indirect or complex means," or, truer to say, by rational means, free from emotional excitement. No emotion, however, plays such havoc as the emotion of fear instinct, which is specially subject to the second law of geometrical progression. The awakening of the fear instinct in a social aggregate is overwhelming, irresistible in its effects. At the basis of many a pathological phenomenon, social and individual, we find the primitive ruling instinct of all life, the impulse of self-preservation with its accompanying fear instinct.

CHAPTER XIII

CLINICAL CASES

THE fear instinct may become associated with any of the bodily functions, *e.g.*, with the sexual instinct, and may give rise to subconscious states characterized by an abnormally developed suggestibility. These conditions may in turn give rise to somopsychosis and psychoneurosis, according to the temperament, the training, and the critical, final event that forms the last link in the production of definite psychopathic symptoms. In all such cases it is not the particular organic function, whether sexual or other, that produces the psychopathic state; it is essentially the awakening of the most powerful and least controllable of all animal instincts,—the fear instinct, associated with the sense of the mysterious. Psychopathic maladies do not depend on the abnormal functioning of some one bodily organ or function, but on a general reaction common to all bodily and mental functions, viz., the fundamental primitive fear instinct which relates to life in general. The deranged functions, cardiac, respiratory, circulatory, intestinal, glandular, or sexual, fatigue, conflict, shock, are only the *occasions*. To regard any of these occasions as the source of psychopathic maladies is like regarding the weathercock as the cause of the wind. *The fear instinct, rooted in the impulse of self-preservation, is the source of all psychopathic maladies.*

I shall adduce here a few cases which may be taken as fair examples of psychopathic cases in general:—

N. R. Russian. Student. Age nineteen. Family history good. Patient complains of heart trouble. He has pains around the cardiac region, suffers from

palpitation of the heart, and thinks he has some trouble of a serious character. A physical examination shows the patient to be in good condition. Except for rapidity and occasional irregularity of action, the heart is quite normal. An examination discloses the fact that the patient had an early training calculated to instil fears of the supernatural, fear of punishment, pain, sickness, death. The fear of committing a sin was ingrained in the patient from his very tender childhood. When about the age of nine he learned in school the habit of masturbation from his companions. Owing to religious and moral scruples, however, the habit did not get hold of him, and he stopped for several years until, when about the age of thirteen, he entered another school and came in contact with a loose set of boys, older than himself, who talked about women and thus excited his sexual passions. The habit of self-abuse continued with various intermissions for two years, when some quack literature fell into his hands. He read in quack pamphlets about the great dangers of masturbation, how it specially affected the heart, giving rise to serious and fatal cardiac troubles. The boy became alarmed; he began to brood over his condition, to listen to his heart, and became convinced that he really suffered from a very serious heart defect induced by his habit of self-abuse. After some hesitation he decided to consult a heart specialist, who told him that he did have some heart trouble of a nervous character. This frightened the patient, as he thought that the doctor did not wish to inform him of the gravity of his disease. He next went to another physician, who, playing on his fear, told him that his trouble was really serious and that he was going to cure it. This frightened the patient thoroughly, and confirmed him in his fears. The dread of heart disease became fixed. For a few years he kept on suffering from heart trouble

with cardiac pains and palpitation,—he became a typical psychosomatic patient. It was the fear instinct —at first aroused by religious and moral fears concerning the sexual function, and then fixed on the heart in an intensified way by the reading of quack literature, and heightened and cultivated by medical examination and unscrupulous medical treatment,—that figured most prominently in this case.

C. L. Chemist. American. Aged forty-nine. Family history good. Catholic, very religious. Great fear of sin, fear of punishment, fear of disease, fear of suffering, fear of death and damnation. About the age of nine the patient had an attack of malaria, from which he suffered for about four years. This developed a fear of disease and death. When about the age of fifteen he learned from boys in school about sexual relations, and had many talks on the subject, which excited him so that he began to masturbate. The fear of the sin committed terrified him. The first night he masturbated he suffered greatly. After the act the fear was so intense that he prayed the whole night through. A week later he masturbated again, and again passed the rest of the night in prayer. He then read some quack pamphlets and especially quack advertisements. He began to fear the dangerous consequences of his self-abuse. He stopped masturbation, but the fear of disease grew upon him. He was especially alarmed on the nights when he happened to have an involuntary emission; he feared the oozing away of his vitality,— a dangerous consequence of which the quack advertisements particularly warned him. This fear lasted until the age of twenty-five. The state of constant terror affected his appetite and digestion. He went to a physician, who told him, after a careful examination, that he was suffering from gastritis, and a very dangerous form of it; that he was

going to be sick in bed for not less than two years, and that he was going to be an invalid the rest of his life. This unfavorable prognosis was duly fulfilled; the patient went to bed, was sick for a couple of years, and has become an invalid,—a confirmed psychosomatic. The fear instinct became cultivated, fixed and centered, by continuous brooding over the function of digestion.

A lady aged thirty-seven. From early childhood fear of sickness and death. When about fifteen she suffered from gastric and intestinal troubles; had severe attacks of dysentery. About the same time she had a shock, her little brother, age two, to whom she was much attached, died of some intestinal affection. This aroused fears in regard to herself. The patient was in bed for two months. It was then discovered that she had a slight lateral curvature of the spine. This accentuated the fear of disease and death, and increased the brooding. A few years later the patient suffered from a severe attack of typhoid fever. After convalescence she continued to brood, fearing that she would become an invalid. The fear of death kept on growing and finally gained mastery over her. As the patient puts it: "I have such an unmitigated horror of death. If anyone I have ever seen, dies, I do not sleep for weeks. I am afraid, though my reason tells me how absurd it is."

Again, I have had cases in which the fear instinct became attached to the hair. Thus, on one young married lady, aged twenty-five, the hair began to fall out. She began to worry over it and to fear that her beautiful head of hair, of which she had been proud, would be ruined, and that she would become bald. She was in agony over the condition of her hair, and finally gave up all social functions, all pleasures and interests, in life. Like Absalom, she was entangled by the fear instinct in the tresses of her hair.

There are cases, too, somewhat less pathetic. The fear instinct, like the sausage in the nursery tale, may become attached even to the nose. Thus, one of my patients, a girl of twenty-two, after a series of attacks of "la grippe," began to worry and fear the depredations of sickness on her beauty. Her attention finally became centered on the irregularities of her nose, on account of coryza. She suffered a good deal in her efforts to correct the supposed nasal defects and then decided to go to a specialist, who took advantage of her ignorance and fear, and performed a slight operation to improve the beauty of the nose. As fate would have it, he apparently infected her during the operation, pimples breaking out all over her face. The fear became a terror, a panic. The fear instinct obsessed her through the intermediation of her nose.

Mrs. J. A., fifty-eight. Loss of strength in left arm and leg, set in three years ago. Fears great exhaustion, faints. Was not a strong child. Had pneumonia. Married at twenty-four; had one boy; had fear of hemorrhage. Had fear her boy was dying from fractured skull,—beam fell on his head at the age of seven. Patient was in an accident with runaway horse. Patient took care of husband when he suffered from typhoid fever.

M. C. G., thirty-eight. Liquor dealer. Brother died of heart trouble. Sister has heart trouble. Mother died of pneumonia, when age forty. Nervous temperament since childhood. Spelling troubled him; had difficulty of going into business on account of spelling; too sensitive about it; wants everything in good order, "apple-pie order." Rarely suffers from headache. Suffers from sleeplessness at present. Has been brooding over fear of poor spelling, which has made him lose confidence in himself. Excessive smoking; after his wife's death he had accident, fell down

unconscious, and fancied knee broken. He has fears that business is going to the dogs; that he is unable to pay his bills; that his second wife may marry after he dies; that people criticise him too much. He has intense fear that some terrible misfortune may happen to him or to his children, or to any of his family. He suffers from fear of incapacity; from fear of fear; constantly asks for "confidence, confidence."

Mr. R. Age thirty-six. Married. Professor of mechanical engineering. As a child was timid, full of fears of dark, of sickness, of being dead, of being punished and ill treated. In 1904 stayed in a hotel with tubercular patients. For some time has been worrying over his poor health and worn down condition. That night he became afraid of the seriousness of his present state, and possibly of his having tubercular trouble. He became afraid that his wife might have also suffered from tuberculosis, and may possibly have a serious attack of it. His wife has been in rather precarious health for some time. As a student he attended to a friend of his who suffered from tuberculosis. Recently a friend discussed with him about contagion. The friend was apparently affected with the phobia of contagion,—at the least occasion or suspicion the latter used antiseptics. This fear of tuberculosis has taken possession of the patient, and makes it difficult for him to carry on his teaching,—his mind is full of fear of disease and possible contagion.

P. G. B. Age seventeen. Had appendicitis about age fourteen. Suffers colds, and coughs occasionally. Dreams little. Heart irregular; lungs good. Patellar reflex lively.

Patient feels odd, automatic, things look far, feels faint. He has fear of remaining alone. Heart troubles him a little; has fear of going in car. He is afraid something will happen to him. Thinks he has lost

self-control. He is afraid of himself, and afraid of seeing people. Thinks something terrible may happen to him. Patient has few dreams; becomes exhausted in sleep. Everything looks like nonsense, not on the earth; has attacks of fainting and fear after which he feels somewhat better; is afraid of everything. Patient has attacks of dizziness with agoraphobia. He has a fear of doing things, the mere necessity of doing causes fear. Patient was timid, full of fears from his very childhood.

S. S., thirty-six. Became frightened because he saw a man who had committed suicide. Patient of timid nature, nervous. The same day when he saw the man he heard a voice telling him to commit suicide. Mother had twice an attack of what he called "craziness." She received a letter that her brother died, the fright brought about an attack. His sister had attack of melancholia.

Patient kept on thinking about the man who committed suicide. The same night he had the dream that someone told him to commit suicide. He is afraid to go into a barber-shop.

E. A., twenty-eight, not married, silk worker. Nervous; father and mother well.

As a child was sensitive, timid; headaches ten years old, eyes then corrected by glasses; not much better; began to work when about seventeen; worries about his fortune; did not sleep; feels restless; face drawn; has taken all kinds of medicines; never satisfied with anything; sleeps well; appetite good; mentally he claims he is in hell, feels as if he were dead. Masturbated little; lived a pure life.

Thinks too much about himself; wanted to be a singer; lost his voice by thinking of himself. "I could begin to cry and weep about myself."

Mr. H. W. Married. Age twenty-six. Patient

thinks he has consumption. When walking down street, trembles and shakes, feels like fainting away. Cannot go alone, must go with some one. Afraid to go insane or drop dead. The first attack five years ago lasted about seven months. Thought he had consumption before the attack, because of profuse sweat, he was feverish. He used to watch over his consumptive brother, thinks about his health, sleeps restlessly. This worry about consumption began when he was about sixteen or seventeen years old; used to suffer from shaking spells of fear. Things appear to him unreal. Patient reads about people committing suicide, he is afraid of losing his mind. Dreams about sickness and death, had bad nightmares. Attention is poor.

He told me that he began to masturbate when about eleven and that it continued for four years. He was afraid that it would undermine his powers, energies. Fear instinct associated with sex.

Mrs. M. F., age thirty-eight. Patient suffers from digestive disturbances. "Never had any luck"; patient complains of "liver disorder"; headaches and pain during menstruation; the feeling of unreality becomes more intense during menstruation; does not suffer from bad dreams. Suffers from severe headaches, from feeling of unreality. Patient has fear of unreality, afraid of it. She is afraid of losing her mind; has a kind of dizzy sensation in head; she is afraid of going on the street, because she is afraid of an attack of "epilepsy or apoplexy." Father had a stroke of paralysis, and mother had a stroke of apoplexy. Both parents were paralyzed, and patient attended on them. Patient suffers from fear fatigue. The whole state is one of intense worry about herself, and about her health. Intense pathophobia.

M. Jeff., twenty-five. Russian Jew. Florist. He

always was very nervous, timid. A year ago contracted gonorrhoea. Got greatly frightened. Then he had nose-bleed. He bought books, read on the subject, became terrorized. He was afraid of falling to pieces. He went to a physician, who gave some medicine; he inhaled the medicine which hurt him. Began to cry, he was falling to pieces. He thought he was burning, his brain was on fire. He is now in constant terror of ruin. Fears that his body will rot away. This fear he contracted from hearsay about people infected with venereal diseases. The fear was strongly impressed on the patient in his early youth.

Mr. H. L., twenty-eight. Three years ago began to complain of heart trouble, body trouble; suffers from agoraphobia; impulsive ideas to do things. Insistent ideas: What is mind? What is body? Why did I say this? Questions himself constantly. Tries to remember things; he cannot remember. Suffers from anxiety and fear. Complains of visual troubles. Suffers from moral and religious fears; full of fear of everything. Thinks of eyes, mouth, tongue; wants to know cause of every movement of the body. Listening to breathing. Everything gives rise to thoughts full of fear and anxiety. Picks up things, forms new fears; has an overwhelming fear of death. Drank whiskey for stimulation; fear tortures him.

When he spits he wants to know why; when he walks he wants to step over pieces of paper; picks up papers. When habit is broken he gets scared. He is scared all the time. Keeps on counting. Whatever he sees he wants to touch. Everything a person talks about enters into his mind and excites fear. The fear instinct and the impulse of self-preservation have obtained an overwhelming control over the patient's mind.

Mr. M. F., twenty-four. (Spanish, Porto Rico.) When fourteen had attack of fear, sudden fright of

devil. The fear lasted a few minutes. Three years ago had a similar attack, fear of devil with fright of insanity. Has attack and then has a fear of committing suicide. The actual attack lasts a few minutes, but patient keeps on worrying a long time afterwards. Has fear of eternal damnation. The attack comes first, and then fear of committing suicide and being damned forever. Dreams, nightmares, leave emotional after-effects during the day and waking life. Education religious. Patient lived in insane asylum since early childhood.

Mrs. A. F., age forty-three. Husband has been drinking more than usual, has been very unpleasant; she became nervous and began to worry about it. Worries about herself; is afraid of going insane, is afraid will never get out of it. She was kept in bed for two or three months. Got some drugs. She feels that a stream is going down her back. Heart in good condition. Has an idea that her brain had given away. Complains of intense *fear*. When put into hypnoidal state she became very much frightened; *intense fear since childhood*. Patient is afraid, does not know of what.

Mr. W., age sixty-one. Neurasthenia, internal troubles, his own diagnosis—catarrh of the stomach, lost forty pounds. Suffers from hyperaesthesia of the intestinal tract; feels depression; worries about every thing. Fears he is going to be ruined, afraid to go out, he might die. Has fear dreams, reproduction of waking fears; cannot concentrate his attention. At daytime obsessed with fear of death. When young was very nervous, he had his mind upon sickness and death. Has also fears about various bodily organs, and about his children. Afraid he may take the wrong train or the wrong trolley.

Mr. D. S. When a child of five had scarlet fever;

no other diseases. Began to have headaches some two years ago; troubles of indigestion began about ten years ago; bad feelings in the throat and heart. Troubles began after father's death which preyed on his mind for years. Began to feel the present symptoms about 3½ years ago, in New York, when he fainted and was afraid of dying. Since that time he has attacks of fear, has feeling of anxiety. When he gets up he feels as if sleep did not refresh him. Has dreams about his father. His sleep is disturbed.

In hypnotic state cried out: "I am afraid I am getting crazy." Gradually got him out of this condition and he began to feel well, though he complained of sensation of lightness in the head.

Ed. H. Age 43, lawyer. Was irritable in childhood, used to kick and scream; as a child had to have his own way. Had idea that he was left-handed (though he was not); had "stubborn" ideas. Has fears about drugs. When riding bicycle was afraid about falling; the same about horses when he fell down. *Fears are formed whenever accident occurs.* When older, formed apprehension about many matters. Worried over his business. Patient began to speculate on the exchange and lost, became nervous, and did not improve since.

Mrs. L. A., age forty-two, married. Two children. Had fears of paralysis. Was very suggestible in regard to fear. Sleep was good, menstruated about age of fourteen.

Was afraid to remain alone. Became interested in Christian Science. Felt revulsion at A's proposal; cannot account for it. Patient thinks husband is concealing something from her. Suffered agony every day during first pregnancy; imagined husband behind prison bars. "This frightful barrier has always been between them." Patient suffered from insomnia and

from extreme nervousness. There was a woman who influenced her in regard to marriage. Husband drinks and to excess. Read about a young woman who committed suicide. Intense fear state.

Miss A. A. Age thirty-seven. At sixteen fell down from horse, has been ailing since; then had an operation for internal tumor. In a sanitarium for four years; sunstroke, dizziness, fear (agoraphobia), and clausterophobia. Heart good, normal; reflexes normal; anemia and insomnia.

Indigestion, constipation. Has been taking bromides; dizziness. Pathophobia; fears from early childhood.

Mrs. M. C., aged thirty-two years, American. Family history good; well developed physically and mentally. A year before the present trouble set in, patient suffered from a severe attack of the grippe. Menstruation, which was before painless and normal in amount, became painful and scanty, accompanied by headaches, indisposition, irritability, crying spells, and backache which lasted long after the menstrual period was over. There was a slight, somewhat thick, leucorrheal discharge. The family physician ascribed the symptoms to endometritis, mainly cervical, and treated her with absolute rest, fomentations, injections, scarification and dilatation of the cervix, and finally curetted the uterus. As the patient grew worse under the treatment, she was taken to a gynecologist, who, after an examination, declared the whole trouble to be due to retroflexion of the uterus, and suggested an operation for reduction. The operation was duly performed, with the result that the nervous symptoms became intensified and the attacks increased in violence and duration. The turn of the nerve specialist came next. Hysteria, neurasthenia, and the more fashionable "psychasthenia" have been diagnosed by various

neurologists. A year of psychoanalysis made of the patient a complete wreck, with depression, introspection, and morbid self-analysis. Patient was put by neurologist under Weir Mitchell's treatment.

When the patient came under my care, she was in mental agonies, a complete wreck. A study of the case traced the fear instinct to experiences of early childhood, fears accentuated and developed into morbid states by the deleterious tendencies of the treatment, giving rise to a *somatopsychosis*.

A lady, age fifty-nine, suffered from kynophobia. When about the age of twenty-nine she was bitten by a dog; since then she was afraid of hydrophobia. She kept on reading in the papers about cases of hydrophobia until the fear became developed to an extraordinary degree and became fixed and uncontrollable. According to the principles of evolution of psychopathic states, the fear kept on extending. The fear psychosis included all objects that might possibly carry the germ of hydrophobia. The neurosis became a mysophobia.

As in all other cases of psychopathic states the psychosis was traced to the fear instinct the germ of which was laid in the patient's early history. The patient was a very timid child and was afraid of strange animals. In the village where she lived there were a few cases of hydrophobia which impressed her when a child. This germ was in later life developed by thirty years' cultivation.

A well-known physiologist reports to me that his little child up to three and a half was not afraid of anything, not even of the dark. At that age she was taken to the country and there associated with servant girls who were afraid of the dark and especially of storms and thunders. One of the girls who was Nova Scotian and extremely superstitious, was in terror

of thunder. Since that time the fear of darkness and especially the fear of thunder took possession of the little child by imitation and suggestion. In fact, the girl who takes care of the child is also afraid of the thunder, and this is communicated to the child. There is absolutely no other cause to the fear as the parents had the child under their direct and strict observation and care.

Similarly I have known a number of cases where people had accidents, thunderstorms, the lightning striking close to them, and who have become afraid of thunderstorms the rest of their life. The interesting point about it is the fact that the people who happened to live with them in the same house, and who before have not been afraid of lightning and thunder, have acquired the fear and were in terror of storms, lightning, and thunder.

Psychopathic symptom complexes I observed in children whose early training was favorable to the awakening and development of the fear instinct. In children affected with fear of animals I traced the fear psychosis to the parents who were afraid of animals, on account of actual traumas in their life history, the child being influenced by imitation, by suggestion, often subconscious, by the behavior of the parents in the presence of animals. Such children are predisposed to recurrent psychopathic states.

In all such cases the etiology is easy to find, if the patient is carefully examined. In many cases the fear instinct with its symptom complex is associated with external objects, giving rise to the so-called phobias. Instead, however, of being associated with external objects, the fear instinct is frequently associated with somatic functions (pathophobia) or with mental activities (phrenophobia).

Man, age forty-seven; actor; family neurotic.

Patient suffered from anorexia, indigestion, choking, vomiting, gagging, eructation, gastralgia, and occasional pains in the limbs. He led a rather gay and irregular life up to the age of thirty-two, when he had syphilis, for which he was under treatment for two years. This scared him, because he had the opportunity to see the consequences of syphilis in many of his friends. He had been under continual fear of the possibility of development of parasyphilitic diseases. Seven years ago, at the age of forty, he had to watch at the bedside of an intimate friend, who had been suffering from severe gastric crises of tabes dorsalis. After one specially exhausting night of vigil, worry, and fear, he went to bed for a short nap and woke up with the idea of general paresis and intense fear. Since that time he began to suffer from symptoms of tabes with fear of general paresis.

Patient had been a very imaginative child; had his fear instinct cultivated from early childhood by stories of frights, scares, and horrible accidents. When ten years old, grandfather gave him *Faust* to read. Since then patient was troubled with the fear of selling his soul to Satan. Was very religious in his childhood, prayed much, was possessed by the fear of committing sins. "It has now all come back," he complained. A great number of fears could be traced to his early childhood. The somatic symptoms were the manifestations of association of experiences of parasyphilitic diseases, based on the pathological state of the fear instinct, a case of pathophobia, a somatopsychosis.

H. M., age twenty-seven, male, Canadian. Family history good; looked pale, anemic, and frail; very intelligent, sensitive, restless, and had a tendency to worry. About a year ago, he began to feel depressed, to worry about his health; thought he suffered from tuberculosis. His physician assured him that nothing

was the matter, but he had uncontrollable fear of consumption, and the fear kept on recurring. Up to the age of nineteen he was perfectly well. He was then laid up with a sore knee for a few weeks. He had time enough to brood over the knee and read some literature on the subject. He thought it was tuberculosis and worried very much. The knee, however, got well, and gradually he forgot all about it, although the fear of tuberculosis often made him feel uncomfortable, and the fear of "water in the knee" used to flash through his mind, to pass away the next moment. A year ago, however, he happened to lose his work, became despondent, began to worry and to brood over his financial troubles, slept restlessly, suffered from anorexia, and began to lose flesh. The fear of the knee and the fear of tuberculosis got possession of him. He could not rid himself of the fear of tuberculosis. If in the clinic, the physician assured him that he was all right, he felt better for a couple of hours; but often it did not last even as long as that. The least pain, cough, heart beat, a feeling of chill or heat, and the like, brought the fear of tuberculosis back to his mind with renewed energy. He was obsessed by the fear of tuberculosis and felt he was doomed to certain death, a psychosomatic pathophobia.

Man, age forty-three, suffered from palpitation of the heart, fainted easily, especially on physical examination by physician, or at the beginning of medical treatment. He suffered from indigestion for which he had been under treatment for a number of years by physicians who gave him medicine for his bowels, and also from time to time kept on washing his stomach. He had a great fear of becoming a victim of cardiac troubles, especially of some unknown, terrible, valvular affection. When under my care he kept on asking to be taken to heart and stomach

specialists to be examined, and have some radical operation performed. Frequently under the influence of the fear states and obsession of heart and stomach trouble, especially the heart, he would collapse suddenly, be unable to walk, and be afraid that he suffered from some paralysis.

On examination, the patient revealed a history full of various traumas which, from his very childhood until he came under my care, helped to bring about his psychopathic condition, and developed the fear instinct to an extraordinary degree.

Physicians had the lion's share in this special case by their rearing of the fear instinct, and by their favoring the patient's phobias by their examinations, by their prescriptions, and by the diet and treatment. The patient was in such a panic that he kept on taking his pulse at the least occasion, was feeling his heart, stomach, and intestines at every opportunity. The hypertrophied growth of the fear instinct had invaded and dominated the patient's whole personality, developed a typical psychosomatic pathophobia with its recurrent states.

In the *Trudi* for 1913 of the Imperial University of Moscow, Russia, Doctor Ribakov makes an extensive study of a series of cases of psychopathic asthma and arrives at a conclusion similar to my own, although he is, no doubt, unaware of my work and publications on the same subject. He comes to the same conclusion with me that the etiology of neurosis is to be found in fear which alone forms the basis of psychopathic neurosis. All other factors, social, professional, sexual, religious, are only occasions of the disease. It is fear and the morbid impulse of self-preservation that form the pathology of the psychopathic symptom complex.

A young lady was afflicted with ornithophobia, fear of birds, fear of chickens. The sight of a chicken

set her into a panic. The patient is very timid, and this timidity can be traced to her early childhood. When at the age of six years, a playmate threw at her in the dark a live chicken. The child was terribly frightened, screamed, and fainted. The mother used to tell her fairy stories full of adventures, of ghosts, of dragons, and of monsters. This prepared the patient to react violently to the sudden attack made by the flight, struggling, and feel of the chicken in the dark. Since that time patient has formed an uncontrollable fear of live birds.

Another patient of mine, a lady of forty-nine years, single, suffered from potamophobia, a fear of going into rivers, or into the ocean. When about seven years old she was thrown into water by one of her elder sisters. She was nearly drowned, and was half dead with fear when rescued. Since then she has been in terror of water, or rather of rivers and oceans. Several times she made conscious efforts to get rid of the fear, but the attempts were unsuccessful. In fact, the more she was forced or forced herself consciously to get into water, the greater was the fear. This fear became all the more intensified, when some of her intimate friends were drowned in a boat. This fixed the fear which became uncontrollable.

A man of thirty-five years was afraid of going out in the dark. This was traced by me to early associations of fears of the dark, to superstitious beliefs in ghosts and spirits, cultivated in the patient's early childhood. He was afraid to remain alone in the dark or to go down at night into cellars or other secluded places. This fear was unfortunately still more intensified by an accident. At the age of twenty-seven, one night when returning late from a visit, he was assaulted from behind by foot-pads. This accident fixed the fear of darkness.

A lady of sixty-seven years, with pronounced arteriosclerosis, had an attack of hemiplegia of the left side. She suffered from motor aphasia, but did not lose consciousness. The paralysis cleared up in a few days, but the sudden attack demoralized her. Since that time she is in terror of another attack. She watches for symptoms, and the least sensation of faintness throws her into a panic. The patient is the wife of a general and was in China during the Boxer riots, in the Spanish American war, in the Philippines and other military engagements. The fear instinct was cultivated in her by all such conditions. In her early childhood there were fears and frights of child character, enough to arouse the fear instinct which was gradually developed and cultivated by the circumstances of life and by worries in the course of the various wars in which she participated or of which she was a witness. Finally the fear culminated by the stroke of paralysis.

Similarly, I had other patients who suffered from tuberculosis, from asthma, from heart trouble, and from all kinds of intestinal affections which specially abound in psychopathic cases. All such cases can be clearly traced to various somatic symptoms, based on the fear instinct. The etiology is fear, the arousal and development of the fear instinct in respect to the special symptom complex.

A patient, age twenty-five, suffered from agoraphobia at various intervals. As a child of nine years, he was attacked by rough boys. He freed himself and ran in great terror. The boys threatened him with another "licking" when he appeared again on the street. He was afraid to go out for several weeks. The parents forced him to go and buy some things. Living in a rough neighborhood, on account of his father's reduced circumstances, he has been many

times subjected to knocks, blows, and assaults by rough boys, until the fear of the open street became fixed into the well-known form of agoraphobia.

Another case, that of a lady of thirty-eight years, married, suffers from ailurophobia, or fear of cats. This can be traced to the patient's early childhood. When she was a child, her brothers and sisters went through attacks of diphtheria, which were ascribed to infection, caused or transmitted by cats. The patient was specially impressed with the danger from cats. Under such training and suggestion given in early childhood, the patient gradually formed a fear of cats. This fear was still more intensified and became a panic when she was put into a dark room and a cat was let loose on the poor victim by her mischievous companions who knew of the patient's fear. When the patient had children of her own, she was still more affected by the fear of cats, on account of the subconscious and conscious fear of infection that may have been transmitted by cats to her children.

P. J. Male. Age thirty-five. Patient is run down, much under weight; digestion poor; suffers from nausea and vomiting. Occasionally suffers from headaches. He is suspicious; afraid he may become insane. Anything in the remotest way associated with insanity is apt to excite and depress him. He is successful in his profession as lawyer; has been elected to responsible offices. He is well connected socially and politically. The present malady he keeps well under control so that only his wife has any inkling of his illness.

The central fear is hematophobia, a fear of blood. This hematophobia kept on growing and spreading until it now occupies his whole field of mental vision. The hematophobia kept on extending, involving more and more remote associations. Anything that may possibly remind the patient of blood is an object of intense fear

and anxiety, accompanied with intense suffering, nausea, vomiting, paleness, fainting, and extreme weakness of the whole body. An attack or a paroxysm of fear is often followed by a couple of hours of deep sleep. After such a sleep the patient usually feels well. The attack simulates larval or psychic epilepsy.

Patient's parents suffered from some form of hematophobia which seemed to have strongly impressed the children. Patient's brother was affected with similar phobia though not so intense in character.

When about the age of six, patient remembers that his brother cut his finger. The bleeding greatly frightened the parents and the two boys. The bleeding finger was put in something that smelt like iodoform. Since then that smell is hateful to the patient. Patient cannot trace his fear to anything before the age of six, but he thinks that the attacks may date to still earlier experiences. Since that time of the bleeding finger patient can trace clearly his attacks which became more frequent, more persistent, and more uncontrollable. Anything reminding of blood in the remotest way sets the patient in a paroxysm of fear which he has great difficulty to conceal. When he takes a shave he must be extremely careful not to cut himself. The sight of a drop of blood causes him to faint. He cannot read physiology, anatomy, or any description of blood or circulation of blood. The patient is in terror of some vague evil. The fear spreads and grows to an extraordinary degree. He is afraid to address a jury,—something awful, some evil may happen.

When I wanted to put my stethoscope on his chest, he became scared. When I tried to take his blood pressure, he became frightened, objected strongly, then agreed. The examination was followed by a typical attack characterized by paleness, nausea, vomiting, fainting, a paroxysm of wild fear. The attack was followed by an hour's sleep.

Patient is afraid that this hematophobia may prove hereditary. He claimed it was in the members of his family, and that he observed it in his little boy of three.

If the investigating psychopathologist digs deep down, by the various psychognostic methods at his disposal, into the patient's consciousness and subconsciousness, so as to reach the very roots of the symptom complex of psychopathic affections, he invariably finds a morbid condition of the impulse of self-preservation and a diseased state of an intensified, exaggerated reaction, central and efferent, of the fundamental fear instinct, the psychogenesis dating to events and experiences of early childhood.

The practical physician, to whom treatment is no less important than causation, psychognosis, and diagnosis of psychopathic maladies, may be interested to learn that almost all the cases of the type reported here have been treated by me by hypnoidization, described in "*Symptomatology*," and also further on in this volume. Some of the cases were also treated by other methods described in a further chapter in this work.

Most of the patients, about seventy-five per cent, were cured. About twenty per cent of the cases greatly improved. The remainder, about five per cent, did not respond, on account of the short time of the treatment.

CHAPTER XIV

PSYCHOGNOSIS OF PSYCHOPATHIC CASES

IT is by no means a matter of chance that one patient should be a psychosomatic while another is a psychoneurotic. This is found, by a psychogenetic examination of the conscious, and especially of the subconscious mind, to depend on the character, temperament, and the whole training of the patient, as well as on the nature of the event that has aroused the slumbering fear instinct. Patients of an introspective turn of mind, with their attention directed to mental and social accomplishments, early trained in the rigid school of religion, morals, and overrefined social traditions, sensitive to any deviations from the "categorical imperatives,"—the commandments given by the divine trinity of religion, morality, and society, as taught in the nursery, the Sunday school, and the market-place,—such patients, when subjected to experiences that touch their sensibilities, setting the primitive fear instinct to work, are confirmed *psychoneurotics*. Patients who are not mentally introspective, but have their attentions and fears turned to their physical needs and bodily functions, such patients are naturally *psychosomatics*.

From our present vantage-ground we can clearly realize why certain experiences become subconscious or dissociated and "present subconsciously," as the clinical psychopathologist is apt to put it. Fear more than any other emotion brings about the factors favorable for the production of subconscious states, limitation of voluntary movements, limitation of the field of consciousness, monotony, and inhibition. We know

what a paralyzing effect on all the functions of the body and of the mind fear has. The man stricken by the fear instinct remains immovable, and his mind is a blank. All ideas except that of the danger at hand are inhibited, and possibly under no other condition is the factor of monotony so operative. All the factors requisite for the production of subconscious states are present in their full force, and the individual falls into a subconscious state, dissociated from the rest of waking life. So greatly is fear conducive to the production of subconscious states, so powerful is the fear instinct in its paralyzing effect on the waking consciousness, that it is often used as a means of bringing about hypnosis and allied conditions.

In all creeds of the "healing" variety, the faith that makes their devotees subject to all forms of subconscious states depends in reality upon the fear instinct. In the superficial love, goodness, and optimism of the mental and Christian scientist is hidden the baneful, the noxious, power of the primitive animal fear instinct. In a superstitious person, or in a person trained in fear from early childhood, an experience conceived in fear begets dissociation, and, as such, becomes subconscious, giving rise to the various forms of recurrent mental states of psychopathic maladies, somopsychosis and psychoneurosis.

The psychognosis of a series of cases are given here, obtained in the investigation of the etiology and pathological foundation of psychopathic disturbances. In the study of these cases one should pay attention to the underlying processes and causative agencies, such as the impulse of self-preservation with its instinct of fear, correlated with the principle of variations in the expenditure of neuron energy with consequent manifestations of psychopathic fatigue, accompanied by its long and ever changing train of psychopathic symp-

toms. The rich kaleidescopic display of psychopathic symptoms is essentially based on these three factors, *self-preservation, fear instinct, and variations of neuron energy.*

At the same time it is of the utmost importance in the study and psychognosis of psychopathic affections to follow the action of the factors which have operated in the growth and development of the psychopathic aggregate, and which have brought the latter to its present state. The principles of the evolution of psychopathic aggregates will be understood more clearly by direct observation and psychognosis of concrete clinical material. It may be well to quote here the main psychopathological principles:

I. The Principle of Embryonic Psychogenesis.
II. The Principle of Recurrence.
III. The Principle of Proliferation and Complication.
IV. The Principle of Fusion of Synthesis.
V. The Principle of Contrast.
VI. The Principle of Recession.
VII. The Principle of Dissociation.
VIII. The Principle of Irradiation or of Diffusion.
IX. The Principle of Differentiation.
X. The Principle of Dominance.
XI. The Principle of Dynamogenesis.
XII. The Principle of Inhibition.
XIII. The Principle of Diminishing Resistance.
XIV. The Principle of Metathesis and Control by Modification.

It is well to keep also in mind the laws of recession and reversion, and the general tendency of the process of mental degeneration.

A

Male, age thirty-one. Russian. Father is nervous; mother is also nervous and suffers from severe headaches, so does his sister, who is otherwise quite well. Physical examination is negative; reflexes are normal; memory, attention, recognition, are good; no sensorimotor disturbances.

Patient suffers occasionally from severe attacks of headache accompanied by vomiting; he has depressing nightmares and cries out in his sleep. He is timid and keeps away from company, communing with himself. In his childhood patient made the round of child diseases. He is physically well, but rather slightly built. Patient is religious and has "never masturbated." About the age of eighteen he developed contrary thoughts in regard to God; he could not pray without associating in his mind the words of the prayer with filthy words and curses. Unaccountable fears took possession of his mind. At the same time sexual desires became developed, and his mind began to associate them with all kinds of improper relations, even with his sister and with his mother. He is miserable about these ideas, and the thoughts are not only repugnant to him, but simply torture him by their very presence. Since last year the patient has become worse, —his sexual and contrary religious ideas have become more insistent.

The insistent ideas have gained such a hold on the patient that he is distracted with mental anguish, with intense pangs of conscience. He can carry on the work of cigar making with great difficulty, and when he comes back from his work, he sits all by himself and is not doing anything, avoids company and keeps on brooding. Occasionally he gets irritable, cries and claims that the "evil one" has gotten possession of his heart

and conscience. He is suspicious and gets easily frightened. The mental anguish of the fear instinct and the struggle with the insistent "evil" ideas become at times so acute that the patient is like one "crazy," yells and screams like one possessed. Occasionally he experiences the sensation of some one pulling at his clothes. When on the point of falling asleep he hears "evil" voices. At night, when on the point of waking up, he is tortured by fearful nightmares, cries and moans before he can arouse himself, or be aroused. Patient wants to leave the city, wishes to get away from himself, wants to commit suicide. What keeps him back is his intense religious belief. The insistent sexual ideas have taken such a hold on his mind that patient is afraid to remain alone with his sister and even with his mother.

In one of our conversations the patient was asked the reason why he troubled himself about the thoughts when he was fully conscious that they were but "nonsense," he replied: "I cannot help it; my head gets depressed and heavy; I should prefer to be in hell than to have this kind of nonsense. When I have these ideas my head is dark; all looks dark. When I attend to my natural wants I think of God and associate Him with it to anger Him. When I spit, for instance, I cannot help thinking 'I spit on God'."

Patient has bad nightmares. He feels that something is lying on him and pressing him; he is afraid of death. He has his eyes open, but he cannot move. On falling asleep, or rather when he finds it difficult to fall asleep, he can hear voices distinctly. The voices talk to him as one man to another; he cannot remember what the voices say. He can hear the voices near the ear, not inside. When patient walks in the street "dreams come to him," then he seems to wake up and does not remember anything. When he goes to bed he

talks to himself, and is even conscious that he answers questions. When he wakes he is sometimes under the impression that the "evil one" has gotten a firm hold on him. There is some one, the evil one, who laughs and jeers at him.

When a boy of fifteen, he used to have vivid dreams, could hear steps of "spirit people" in the room. He used also to be frightened by shadows, a fear which dates far back to his early childhood. When about the age of twenty, he was tantalized by the idea of death, though not of suicide, represented to himself the angel of death very clearly, and "the fear made him feel faint." Last summer, to counteract the sexual thoughts and excitement, he attempted (on the principle of metathesis) to revive the image of the angel of death in order to feel faint, but he did not succeed.

About six years ago patient worked on the sewing machine; one day he suddenly lost the power of movement in the legs. This paralysis lasted three days. He improved and went to his work. Two years ago patient suddenly lost the use of the right hand and right leg. It was not so much an actual paralysis as an intense pain in moving the leg and hand. He could not raise the elbow and dragged the leg. This lasted from April, 1900, to February, 1901. A year ago a young girl came to visit the family and was placed to sleep in the adjoining room. This developed an intense sexual excitement, with thoughts of sexual character. When this fear developed, the pain and paralysis ceased. One fear was substituted for the other (on the principle of metathesis). The sexual thoughts are accompanied with "burnings" which cause the patient great sufferings. These thoughts come periodically. The evil and "nonsense" thoughts are almost always present and give him no rest.

Patient feels dazed; does not know where he is, what he is doing, whether he lives at all. Everything is "like nonsense." His hypnagogic and hypnapagogic hallucinations consist of ugly faces without hands and feet and of other grotesque visions. The insistent ideas are somewhat like "voices,"—they call him names, they laugh and jeer at his religious beliefs, at all that he regards as moral and sacred. He feels that there is another person in him that instills in his mind those evil ideas against everything that is holy. The more he fights the more that evil person confuses his thoughts with "unholy ideas," and finally even paralyzes his body. Patient can read well "profane writings," such as newspapers, novels, but a religious book, and especially the scriptures, awaken in him the evil one who makes him suffer untold agonies, intolerable pangs of conscience.

I may add the following interesting letter written to me by the patient:

"I give a short account of my life so as to help you to form an idea of my condition. I hope you will pardon me for putting you to so much trouble.

"In my early childhood and youth I suffered a good deal and many times I had to go without food. When I was about fourteen, I lost two brothers, one younger and one older than myself. The younger brother, a boy of three, I used to take care of and instructed him. I loved him more than my own life. Besides, my parents were at that time in very poor circumstances. I was greatly upset and felt deprived of bodily and mental strength.

"I began at that time to learn the trade of jeweler, but as my mind was weak I could not do the work, and after ten months of great suffering I fell sick and had to give up the work altogether.

"I then obtained a position as clerk in a small store

and had trouble. You can see, therefore, that up to the time of my coming to this country I have suffered greatly and still continue to suffer.

"I shall now describe the silly, evil thoughts that torment me so fearfully.

"When I was eighteen years old it suddenly occurred to me to curse the Creator. The curses were awful. Since then *my personality has changed.* Confusion came into my mind. Evil thoughts got hold of me. I began to substitute contrary sentences; thus, instead of 'The earth is full of His glory,' I substituted 'The earth is full of his filth.' During prayer these thoughts would come to me. The most indecent, filthy thoughts would come to torment me. I would cry for hours and struggle against them, but of no avail. The more I tried to drive those thoughts from my mind, the more persistent and unholy would they become. Since then I have become depressed and melancholy. I have lost all desire for life. I feel as if I would like to go into a desert and there die. I want to live and have a quiet, undisturbed mind. I am a human being; I cannot hide myself. I have eyes and ears, but everything I see and hear is transformed into evil.

"I cannot undertake to describe all the bad thoughts that enter into my mind. If you could drive all this nonsense from my mind without weakening my love for my people or my religion, if you could bring it about that I could read the Bible without changing the thoughts into evil, and my mind should be clear of horrible fears, you would save my life. Oh! if light should dawn upon me and my mental darkness should disappear!

"I have confessed to you everything, more than I would to my father and mother."

The condition of this case can be understood in the light of the patient's childhood, revealed by means of

various intermediary states, and by indirect inquiry of the patient's parents and sister. The patient passed his childhood and youth in extreme poverty and misery, in the midst of social, political, and religious oppressive fears. Living from his very babyhood in misery, extreme poverty, and squalor, often enduring cold and the pangs of hunger, surrounded by disease, sufferings, pains due to starvation, affected by sickness and death of those near and dear to him, the patient, with all his natural intelligence, had been fostered in the strict religious belief of a fearful Providence. With all his needs, desires, and instincts, thwarted and mocked at by the merciless conditions of life, subconscious protests began gradually to form by principle of contrast; the protests, gathering force, finally burst forth with the crisis of adolescence. It was a protest of subconscious mental activity against a life of misery, hallowed by a religion of fear.

Out of the chaos of discordant, dissociated elements we see the formation of an ill-shaped, maimed, but defiant, subconscious, secondary personality of nihilistic tendencies,—a state through which his country and countrymen are now passing. We witness here a struggle full of anguish and agony of fear between a shattered personality and a newly-forming self out of a chaotic, disaggregated subconsciousness.

Like the demoniacal possession of the Middle Ages, it is the reading of the sacred scriptures that throws the patient into a condition of distress and of inner combat of discordant elements. The patient is not fully aware of the why and wherefore of the "pangs of his conscience," but still he seems to have some dim suspicion of the nature of his malady, when he asks for help "without weakening my love for my people and my religion." The patient's condition is the agony of a mortally wounded self struggling against the merci-

less onslaughts of a pitiless, secondary self formed out of chaotic states of a disaggregated subconsciousness,—the struggle of a terrorized animal.

In all such cases we find the workings of the impulse of self-preservation and the fear instinct, having a disaggregating influence on the human personality.

B

Mr. D., a young man of twenty-five, born in Poland. As far as can be ascertained, the parents, as well as the brothers and sisters, are well. A physical examination of the patient reveals nothing abnormal. There are no sensory, no motor disturbances. He complains of severe headaches, preceded by a feeling of indisposition, depression, vertigo, and distress. During the attack there is hyperesthesia to touch, pressure, temperature, and to visual and auditory stimulations. *The patient shivers and looks pale.* The cold experienced during the attack is so intense that the patient has to wrap himself in many blankets, as if suffering from a malarial paroxysm.

Fears have strong possession of the patient's mind. He is afraid to remain in a closed place in the daytime and especially at night, When he has to remain alone at night, he is in agony of fear, and cannot go to sleep. Every passer-by is regarded as a robber or murderer, and he quakes at the least noise. When walking in the house in the dark, he has the feeling as if some one were after him, and occasionally even experiences the hallucination of some one tugging at his coat. He is mortally afraid of the dead and shuns a funeral. The patient has also a fear of dogs, a cynophobia. The fear is irresistible and is as involuntary as a reflex.

An investigation by means of the hypnoidal states, brought out of the patient's subconscious life the following data:

When a child of three years, the patient lived with his family in a small village near a large forest infested with wolves. In one of the intermediary states a faint memory, rather to say a vision, struggled up,—a vision of wolves and dogs. Some one cried out: "Run, wolves are coming!" Crazed with fear, he ran into the hut and fell fainting on the floor. It turned out to be dogs instead of a pack of wolves. It is that fright in early childhood which has persisted in the subconscious mind, and, having become associated with subsequent experiences of attacks of dogs, has found expression in the patient's consciousness as an instinctive fear of dogs.

But why was the patient in such abject terror of dead people? This found its answer in the experiences and training of his early life. When a young child, the patient heard all kinds of ghost stories and tales of wandering lost souls and of spirits of dead people hovering about the churchyard and burial grounds; he heard tales of ghouls and of evil spirits, inhabiting deserted places, dwelling in the graves of sinners and the wicked. He listened to stories of haunted houses and of apparitions stalking about in the dark. His social and religious environment has been saturated with the belief in the supernatural, as is usually the case among the superstitious populations of Eastern Europe. We cannot wonder, then, that an impressionable child brought up under such conditions should stand in mortal fear of the supernatural, especially of the dead.

When the patient was about nine years old, his parents noticed some prominences on his right chest. It was suggested to them that the hand of a dead per-

son possessed the property of blighting life and of arresting all growth, and would therefore prove a "powerful medicine" for undesirable growths. It happened that an old woman in the neighborhood died. The little boy was taken into the room where the dead body was lying, and the cold hand of the corpse was put on the child's naked chest. The little fellow fainted away in great terror. The fear of dead people became subconsciously fixed and manifested itself as an insistent fear of the dead, and, in fact, of anything connected with the dead and the world of spirits.

The patient had hardly recovered from the shock of the "dead hand" when he had to pass through a still more severe experience. A party of drunken soldiers stationed in the little town invaded his house and beat his father unmercifully, almost crippling him; they knocked down his mother, killed a little brother of his, and he himself, in the very depth of a winter night, dressed in a little shirt and coat, made his escape to a deserted barn, where he passed the whole night. He was nearly frozen when found in the morning, crouching in a corner of the barn, shivering with fear and cold.

From that time on the headaches manifested themselves in full severity, with hyperesthesia and deathlike paleness and intense cold of the body.

The early cultivation of the fear instinct resulted in a *psychoneurosis* with its recurrent states.

C

Mrs. M. M., Armenian, Aintab, age 27, medical student; married, but divorced six years ago; has child by marriage. Last March (1913) had a serious attack of diphtheria: then about eight weeks had a lapse of

personality, patient does not know where she is, does not recognize her face. Suffered from insomnia, had to take bromides; has shaking spells. Worked hard as interne, worried about child, about the work, about the future. Was very religious. Afraid of insanity; dreams of her morbid condition. Used to be afraid of the dark, of robbers, afraid of her face, cannot associate it with herself, had to look at herself to make sure that she was herself. One day was looking into a mirror to make sure of herself; a sudden attack of fright, did not know of what; had various fears at the age of ten. The attacks of fear occur about two or three times a week, afraid to remain alone. Suffers from headache, nervous chills, noises in the ear.

The patient gives the following account:

"During the last six years great deal of fear of kidnapping of the child by his father—hard work nursing all summer and going to school and during school terms working for board and room—no vacation during all this time (six years) and great deal of anxiety during the trial of separation and divorce case.

"Present sickness: Diphtheria—first of March—days in bed—no antitoxin given, because was vaccinated for smallpox twelve days previous to attack."

Complication, myocarditis, nervous prostration.

"Had two days rest at home after the discharge from hospital and went back to school. Began to have dyspnoea, palpitation, tremors of the hands and feet, pulsation of superficial vessels, headaches, buzzing and ringing in the ears, vertigo, nervous discharge which seemed to depress and crush the brain and extend over the spine, and which caused a kind of dazed feeling for a few seconds, then disappeared, terminating in a cold perspiration. These attacks came on mostly after lectures; and had one or two a day. In this condition continued school for two weeks; at the end

of this period one day at the lecture had this attack, but seemed as though was not able to use the right hand, tried to write, but was not able to hold pen, tried to walk, but was too weak, it seemed as though had eight feet—was taken away from lecture room and given some heart stimulant, then put to bed. At the end of half an hour had one more of those attacks, this time it seemed as though the right side of the body was helpless, it seemed like passing away, dying, was not able to speak for two to three minutes but didn't last, at the end of a few minutes dyspnoea grew very much worse and also dizziness;—was sure it was the last moment of life.

"After a while hands and feet were ice cold and then came a chill just like an extremely bad malarial chill. It seemed as though all the bones would break or dislocate by shaking, the chill lasted twenty-five minutes, terminating with cold perspiration and discharge of great quantities of urine; during the attack was very frightened. After this attack was in bed two weeks; had four or five more attacks similar to this one, but very mild.

"During these two weeks was not able to write or talk for any length of time, was very much depressed, was sure was not going to live, and was making preparations for death. Had a very bad headache—sometimes continuous contraction and relaxation of all the muscles for two or three minutes. Noises in the ears. Spasm of muscles of mastication and of the muscles of the right eye, and symptoms of nervous prostration. The third week grew better and went back to school.

"On my third day at school left the room to go to school, suddenly became dizzy, it seemed as though I was wrapped in a black cloud, and separated from all the world, was completely lost to my surroundings. I then became stronger and stronger, it seemed as

though I went away from this world and left my body behind. I was not able to decide where I was or who I was; then this question came to my mind, "I wonder where I am.' 'Am I dead and is this the second life?' 'Was it a true fact that I have been sick and dead and this is another stage of life?' 'Am I in Philadelphia or somewhere else?' 'Is this my own home?' 'Are these my own hands?' 'Is this my own dress?' 'Yes, I can remember where I bought this dress and these shoes so there must be something true about me, but where is my own self? What happened to me? Something went away from me, what was it? Was it my own soul or the thing we call self or personality? Where is my room—I must try to find it."

Intense fear of loss of surroundings and fear of loss of personality are at the basis of the symptom complex. A morbid impulse of self-preservation and the fear instinct form the pathology of the case.

D

I

Patient is physically well developed; a well known professor of physics in one of the foremost institutions in this country. He suffers from attacks of loss of personality. The attack is of a periodical character, coming on at intervals of two weeks, occasionally disappearing for a few months, then reasserting itself with renewed energy and vigor. During the attack the patient experiences a void, a panic, which is sudden in its onset, like *petit mal*. The trouble was diagnosed as larval or psychic epilepsy; the patient was referred to me by Dr. Morton Prince as an interesting, but puzzling case.

Patient feels that his "self" is gone. He can carry on a conversation or a lecture during the attack, so

that no outsider can notice any change in him, but his self is gone, and all that he does and says, even the demonstration of a highly complex problem in integral calculus is gone through in an automatic way. The fury of the attack lasts a few moments, but to him it appears of long duration. He is "beside himself," as he puts it. He seems to stand beside himself and watch his body, "the other fellow," as he describes it, carry on the conversation or the lecture. "He is knocked out of his body, which carries on all those complicated mental processes." For days after he must keep on thinking of the attack, feels scared and miserable, thinking insistently, in great agony, over his awful attack, *a recurrent, psychoneurotic phrenophobia.*

At first the patient could trace this attack only as far back as his seventh year. Later on, earlier experiences of childhood came to light, and then it became clear that *the attack developed out of the primitive, instinctive fear of early childhood*, fear of the unfamiliar, fears of the dark, of the unknown, of the mysterious, to which he had been subjected in his tender years. This state was further reinforced by the early death of his parents, it was hammered in and fixed by hard conditions of life, full of apprehension and anxiety. Life became to the child one big mysterious fear of the unknown. The fear instinct formed the pathological focus of the attack. As the patient puts it: "It is the mystical fear of the attacks which overpowers me."

With the disintegration of the focus the symptom complex of the attacks disappeared. The patient is in excellent condition, he is doing brilliant research work in physics and chemistry.

I give extracts from my clinical notes of the case:

D

II

H. T. K., twenty-five, married. Father died of Bright's disease. Mother died of appendicitis. Only child. At age of seven walking down street with uncle, things and persons became suddenly peculiar. The attacks seem to date from that time. During the brief attack patient can keep on with his work, the senses are not affected. It seems as if life is gone, it is a sort of emotional attack. Intellectual activity goes on. At the age of thirteen began to have attacks very hard. Fixed ideas of having "narrow shoulders at seventeen." This lasted about six months.

The attack lasts about a fraction of a second. Feeling of fear. Keeps on thinking, "what am I?"

Between attacks has the feeling of fear, does not know of what. Has been treated for years in the city hospital. Physicians regarded attacks as *petit mal*, and treated him for epilepsy.

Under Von Monakov in Zürich winter of 1905.

Janet in Paris spring of 1906.

Then Prince and others fall of 1906, 1907.

September 6, 1908. Hypnoidal state: patient very quiet. Remembers that when about age of four in school was excited, and was afraid when teacher called him out.

Patient remembers distinctly walking with his uncle; electric lights shining, then all appeared queer. Was always afraid of the dark. At waterfall in New Hampshire, he was about this time riding in carriage in the daytime. Old grandmother was afraid of railroad tracks and he was worked up, suffered mentally. During the walk that he had with his uncle some such feeling came about. During the same visit had met

a hermit who scared him. Remembers suddenly that a little child died there by being lost in snow storm. Saw the grave. This happened when he went up Mount Washington.

Remembers distinctly that he was much excited when he was about four. Had to imitate the teacher, did not know whether he would be able to recite. Kept on asking himself whether he could do the things. Since that time used to put himself questions whether he was able to accomplish certain acts, such as swallowing.

Once patient went to father and said, "Papa, I am afraid." "Afraid? Of what?" asked his father. Did not know of what.

When his father sent him on a dark night to drug store, patient had the fear of loss of personality. Kept the fear to himself. Always got that feeling.

Was afraid of unreal things, fear of ghosts. Does not remember whether he had fear of darkness before age of seven.

Patient eight years when mother died; he remembers his mother's death. He knew his mother was dead. Sat on steps the whole day while mother was in coffin; was much frightened.

Patient finds that in his spontaneous hypnoidal states after meal or when going to sleep, he can remind himself of these experiences: Went to see a play, "The Fall of Pompeii," picture of the lava overcoming the people. This experience stands now out clear and distinct in memory. Next is seeing some tragedy; remembers father and mother cried over the fate of the heroine. After these experiences had his attacks. The experiences were frightful.

In one of his hypnoidal states patient emphasizes the feeling of something that is worrying, something that he must think of. He has this feeling every time; he

must think of something awful, and then the something indefinable, unknown melts away, the fear and the crises set on.

Patient went into deep hypnoidal state with shivering, kept on shivering, could not answer questions.

September 12. Has anxious feeling, begins to think of something. Has feeling of something, trying to remember, of something forgotten which gradually passes into loss of personality.

He thinks that on the average the good period lasts ten days. Has indefinite tantalizing feeling, feeling of unreality.

I put him in a deep hypnoidal state. Intense fright, shivering. Respiration became heavy, rapid, the whole body is hypoaesthetic, could not catch his breath. Sees red light. "Something is going to happen to me, I would like it should."

Sees flickering lights, bright lights with dark spots. Suddenly memory came, long forgotten. Mother and grandmother used to give him piano lessons, went to attic, before going to bed saying his prayers, scared in the dark.

Father used to make him play alone in dark room. Patient was afraid to remain alone. This memory came to him suddenly.

September 14. Begins to feel as if he wants to induce the attack so as to be sure that it is weakened. Last night worked in laboratory, turned out lights, just as he came out had hallucination of grizzly man, who had an awful face, small in stature, all grizzly and crusty. As if he came from another planet. Fears not earthly, but supernatural things. This is a reproduction of a child fear.

Another experience (September 12): At night when going from bed to bath idea came: "Don't go! it will be fatal!" This is another of his child fears.

September 14. Went into hypnosis, the whole body became sensitive. Respiration irregular.

Later on (after he woke up) said he remembered (though he knew before) an old man he visited in the mountains, a hermit. "That (he said) might have had to do with the hallucination of a grizzly man."

September 17. Had attack on the fourteenth, it keeps on again and again, coming on when he gives up his work; it is like something *he has to remember.* Something forces him to think, 'what am I?"

In hypnoidal state he remembers went up hill with his father; was very small; had same feeling of fear of loss of self. Does not remember whether it was night or day.

Since the hallucination of the old man patient is afraid to remain alone in the laboratory.

He knows he was very sensitive as a child, much frightened when he saw the waterfall. The waterfall looked awful; patient was scared, "hair standing on end." Walked up a great flight and looked down (idea came suddenly). Patient was appalled, it looked supernatural. His father was nervous, and he was excited when he saw his father.

Dates the frequent oncoming of his attacks to time when he and his wife were in Berlin; he and she played tennis, suddenly she fell down, she had hallucination of her lost brother. Patient became frightened and had many attacks since.

September 19. Feels miserable; has attacks quite often; feels as if he was in a strange country; may have five to ten of fear attacks in an hour.

Hypnoidal state induced by pressure on carotids. After a few minutes, memory emerged. Walking in back alley; was frightened; memory is vague. Back of the house was high fence; thinks he had his first attack near that fence, someone might have chased him.

Did not know it before. This experience flashed upon his mind, cannot get the details. Some boys chased him, drove him to climb fence, frightened, had attack. Sees pictures distinctly.

Remembers he was a little fellow, then heard something strike the floor, thought lost a bone; was frightened; sink over his head, must have been about five.

September 21. Patient had attack of short duration.

Hypnoidal state, by pressure on carotids; felt calm, but soon told me he had an attack, "saw himself beside himself." Attack of short duration.

Patient was in hypnoidal state. Suddenly told me "that back yard keeps on coming," "can see myself in the back yard, blind alley, something bad; afraid, does not know of what, I can see it clearly."

Thinks that the New Hampshire experience and the "Fall of Pompeii" laid the foundation of his attacks but bicycle ride experience was much stronger. This attack came like from a clear sky; attack passed off as soon as he came home. Bicycle ride took place about ninth year. Patient had been riding to South Framington; had been riding the whole day; was afraid his father would worry; would look for him at the police station. Then he was afraid to go away far. The attack came on, then repeated itself a few times. That was after the uncle experience.

Patient thinks that this uncle experience was because patient was away from home at night. It was raining, saw row of lights, things appeared to him queer, dizziness. Anything brilliant, anything strange will affect him that way. Coney Island, St. Louis Exposition brought attacks.

New Hampshire experience was about the time the patient went to kindergarten. He was in grammar school about seven years old. Patient has letter which he wrote after New Hampshire experience. He clearly

remembers the experience of the ride and of his fright; nothing stands out so sharp in his life.

"It is like one nagging," he must think of something, does not know what; loss of feeling of reality.

From October to February, patient is getting fewer attacks, but occasionally gets a prolonged one, with short ones following.

November 8, 1908. In hypnoidal state suddenly came to him that when he was about four, thought about not being able to read in school (kindergarten). Greatly affected. Ran home, something happened. Thinks first attack happened then.

In hypnoidal state, it suddenly appeared to him that he was told that about the age of four he was buried alive; does not remember it though; but it occurred to him now. Added that this might be connected with the fact that the worst thing with him is the feeling *of being smothered alive.*

Patient has attacks when in the dark (going to station) or in light (when playing piano.) Solitude may bring this on. When interested in problems, enthusiastic in work, when reserve energy comes out, attacks disappear.

Thinks that under given circumstances can induce an attack. When eight to nine years, going down the street (dark), strong light in front used to induce attacks. Thinks first "what am I," then gets the attack of lapse of personality.

Hypnoidal state, attack set on with hallucinations of being in the White Mountains. "I think I was brought up to be introspective, to look at myself from the outside, selfish."

Attacks of loss of personality occur in his sleep. The personality attacks appear in dreams.

When he says his prayers he is predisposed to have attacks; at any rate he is apt to get into trouble.

If he is in one of the moods and says his prayers then he gets an attack. Gets his fear when in intermediate states, especially on waking up.

December 24, 1908. Patient has some vague attack-dreams in sleep. Wards off attacks during the day.

D

III

The attacks or lapses started at a very early age, due to intense fear on the part of the patient; the earliest one definitely in mind is that which occurred when walking at night down a street with long rows of lights. Another early one was in New Hampsire (age eight) and again at the "Pompeii performance" (age ten). All of these were promptly forgotten as soon as over and the following day was lived with no thought of them. Even when (age ten and a half) the attacks came regularly from night to night when sent out alone in the dark on errands. Immediately upon returning home the experience was forgotten and the following day was lived, as if nothing happened.

When at the age of thirteen the attacks came on once more (in school yard), they made a deep impression. The patient deliberately brooded over them at that time and would spend hours alone, buried in the mystery of them, for to him they were unusual, disconnected with anything else in his career and consequently seemed essentially mysterious. The question, "What am I?" seemed to be the central idea and the attack itself seemed more or less secondary. The patient used to insist, when questioned by physicians, that he asked himself the philosophical question,

"What am I?" and then afterwards experienced the attack. It was a positive relief later to be convinced that the attack "really came," that is, that it was an emotional state and not the result of a mental trouble. In short, the whole matter was bound up in mystery in the mind of the patient; the question, "What am I?" indicating that he felt that his personality was involved in some mysterious manner.

This brooding mystery has been the fuel which subsequently has fed these attacks. Similar ones, naturally of most varied character, among various children, are extremely common, but are usually completely lost and forgotten as the child grows older, and in this case they would have died out naturally for want of attention had not this mysterious feeling and attitude concerning them caused them to be kept constantly in mind.

The influence upon the patient of the sense of the mysterious in connection with this trouble is of the greatest significance. This sense of the mysterious is shown to be a deep-rooted part of his make-up, in his attitude toward many other more or less commonplace subjects, notably his general fear of the dark. It is this sense of the mystery, surrounding these attacks that has made it possible for them to assume so much importance in his mind and consequently to develop. In his early life the attacks were relegated to the mysterious and the hours of brooding and thought, which he spent concerning them, were executed in a state of great emotion, particularly of fear, due to the apparent mystery of the whole affair. Each subsequent attack immediately aroused this associated, mystical fear which became the habitual after-effect of every attack. Gradually the fearful, uncertain state of mind became more stable and stronger than the attack proper, because it persisted over long intervals of time and was

a cause of great anguish and depression. With proper comprehensive treatment this great mass of associated fears which the attack arouses should no longer continue and consequently its main source of annoyance should be removed.

The attack comes in a very trifling manner, often by some little twist of thought under just the proper external conditions. Without the after effect of fear, which can only come when the patient's mind regards the whole matter as being dark and mysterious, they would gradually dwindle away and disappear.

Lately, the patient, while being tolerably free from attacks proper, experiences more the direct sensation of fear without any apparent definite cause. This is the outcome of the long continued habit of being fearful which has been developed as a result of the brooding and consideration of the mysterious attacks.

It is still the mystical fear concerning these attacks which overpowers him. The attack is a momentary intense fear, perpetuated from child experiences, such as was aroused in him when out alone at night in the dark on errands. The patient retains consciousness and memory. The attack itself is of brief duration, and if it were not for the after-effects, would be comparatively easy. As a child, the experience was one of true, natural, instinctive fear, causing a disturbance in the form of the present attacks, which, owing to later conditions, was never outgrown or forgotten. Instead, it has actually been cultivated by deliberate brooding, and by thoughts analagous to "What am I?"

The attacks are short in duration. It is only the fear of them and the after anxiety which is terrible. This could not exist, if the attacks were deprived of their mystery. The terrible pang that comes with them or when thinking of them sometimes is a "panic" of fear.

Many daily experiences in the patient's life show his subconscious suggestibility. This helps him to understand that the sudden attacks, when in strange surroundings, are due to his early experiences. This condition of worrying has persisted for so long a time that it has become a fixed habit and has gathered with it a tremendous amount of momentum. Lately the attacks come infrequently, but the remembrance or idea of them which comes frequently, arouses the patient to a state of mental anguish. This is because during all the past years, this attack has been associated with the fearful and the mysterious, and now each time it flashes across his mind, it brings those associations with it in the form of a vague fear.

D

IV

The following is an account written by the patient:

"The earliest recollections* I have of nervous troubles are in connection with being sent to kindergarten school at the age of four. I am told that I disliked to go to school and persistently fought against it, often running away from the school. I now confided much in my parents and do not remember that I told them the following, but it probably was responsible for my dislike of school. I used to be called upon by the teacher to read aloud before the class, consisting of my little playmates. This I did with terrible dread, for I was extremely self-conscious and was nearly overcome with the thought 'Suppose I should not be able to speak and read how terrible it would be before

*These recollections were partly revealed by the hypnoidal, twilight method.

all the children.' This led me to think 'How do I speak?' which thought troubled me greatly, and at times almost interfered with my speaking.

"I was buried in a snow-bank about this time (age four years) and rescued by a little playmate in an almost smothered condition. I have absolutely no recollection of this event, but remember having heard it spoken of a few years after it happened by my rescuer while we were both very small boys. I have corroborated this by speaking of it to the same person, now a young man about thirty years of age. All through my life I have entertained a most morbid dread of stifling or choking or smothering. At one time (age twelve) I used to ask myself, 'How do I swallow,' until I nearly choked at meals. At another time (age twenty) I called a physician in the night fearing I was smothering, when I had in reality only a cold. A little bromide gave me immediate relief.

"There were certain streets and places near my home which always seemed gloomy and depressing, although for no definite reason. (Age four to eight.) During this period (six to eight) I was taken to the White Mountains with my mother, father, and grandmother. My father was quick-tempered, high strung, nervous, and intellectual. I was always striving to please him and hiding from him everything which would disquiet him. He was much excited about the change of trains on going to New Hampshire and I suffered mentally the whole responsibility of the trip of caring for my mother and grandmother. My grandmother was mortally afraid of train crossings of which there were plenty, and I suffered for her all the time without saying a word. Finally on one of our trips to a deep waterfall gorge in the mountains, while walking along between the great rock cliffs, I was overcome with a most queer sensation. I felt disconnected from myself

—my personality was unreal—I had an attack similar to my later ones which frightened and disturbed me. This repeated itself at least once again during the trip; I worried and thought about it some, but still I never told anybody of it.

"Either shortly before or shortly after the N. H. trip I experienced a series of similar attacks while out walking one night with my uncle. I remember the long row of lamps on the street, and how strange and frightened I felt, but I said nothing about it.

"These early attacks were forgotten the next day and left no particular ill effects.

"My grandmother cared for me for the most part and used to hear me say my prayers each night upon going to bed. I can remember nothing unpleasant about her nor her method of training me, although it might well be that the following characteristics of later life are due to her religious influence. I never miss saying prayers upon retiring and often have a mild attack at the time. This used to be true at the age of thirteen to fourteen more than nowadays. Sometimes perverse notions such as, 'Suppose in my prayer I should curse, etc.,' often disturb me. Neither of these has been a great source of trouble to me.

I have always had a great fear of the supernatural when left alone. I am never afraid of robbers when alone at home or animals when alone in the woods, but am mortally afraid of the sudden appearance of some mysterious unknown, or of someone departed, as for instance the ghost of one of my parents. This was always so and is so today, perhaps because I was very much alive to the situation at the time of my mother's death (age eight) and of my father's death (age eleven). This also never disturbed me seriously, although it is most persistent and characteristic.

"One early event (age seven or eight) is very clear

in my memory. I was at the theatre with my mother and father to see the terrible tragedy of Soudan. I remember the terrible death struggle of the leading lady. This together with the apparent unreality of the whole situation within the theatre—the crowd, the lights, etc., caused me to have a definite attack, which however, like the other early ones was promptly forgotten.

"Considerably later (age ten) I had the same experience when witnessing the Fall of Pompeii at night in an open air theatre. I seemed appalled by the unnatural artificiality of the situation—the lights, the crowd, the dreamlikeness of the play, all made me subtly question my own reality, and the result was an attack.

"In later years I have at times been suddenly thrown into an attack by looking into a moving picture machine, by witnessing moving pictures at the theatre or by the great display at a place like the St. Louis World's Fair. A strange, crowded city street often does the same. Recently I had the same tendency, but I can usually avoid the strenuous attack, because I realize what it is, and am not thrown into a panic of fear at the first slight effect.

"The year before my father's death (age eleven) I had a number of attacks. He used to send me to the store alone at night, and invariably at a certain hill, as I looked down upon the lighted square below, I had an attack. I was terribly frightened to go out alone. These were probably the first systematic attacks. Again, when far from home on a bicycle ride, and often on the way back to the city from the beach with him, I had attacks. I used to be sent upstairs alone at night to practice on the piano for an hour. I was afraid to be alone, and was tired. The light seemed too bright, at times, almost as if it shone into my head

through holes. I would suddenly stand up from the piano stool in the midst of an attack.

"None of these left after-effects the next day, nor did I tell anyone about them.

"One day I returned home from playing all morning, and was waiting with my father for dinner. I had no attack, but a terrible anxiety or fear hung on me. For the first time I confided in him saying, 'I am afraid.' This was promptly forgotten like the rest. I was a vigorous, active boy, unusually bright at school, and advanced for my age. This was not interfered with by my attacks, although I recall many occasions when I seemed strange and greatly depressed. When I was at the age of eleven, my father died and I was left with a guardian whose family felt little sympathy for me. I had occasional attacks of small consequence until I was thirteen years of age.

"At this age, one day in the bright sunshine, while entering the school yard, I had an extremely severe attack. I yielded to this and returned home, having several other attacks on the way. For days I could not relieve my mind of the matter. In some way I got hold of the question, 'What am I' in connection with the sensation of the attack. My guardian laughed at my plight, and I would lie alone in my room for hours, brooding and thinking about the attack and 'what am I.' Physicians were visited who neither understood my condition nor interested themselves particularly in me. I used to say, 'I think "what am I," and then I don't know what I am and have an attack.' I used to answer after much reasoning that I am just what is asking the question, 'What am I' and desiring an answer to it and feeling so badly. This answer relieved me temporarily. In this way I went on for months having almost daily attacks at intervals. I finally persuaded myself that this was a real attack. The attacks came,

too numerous to tell. Dr. T. gave me bottle after bottle of bromide. This severe condition lasted about six months (age thirteen). Often at the dinner table which was brightly lighted from overhead and at which I was an insignificant unit among a very large family, I would disturb the meal by rising from my place in the midst of an attack. I received no sympathy, and would return to my room to brood.

"During the summer months I went to a seaside resort with the family and improved somewhat. Upon returning I entered high school for the first time. At the first exercise I was obliged to leave the room, because of an attack. That was the last attack for three years. For some reason I was absolutely free from them during the next two years at high school and the following first year at business. I was fascinated with my work, making scholarship records, winning prizes, etc., and I practically forgot that I ever had an attack.

"After a year in business (age seventeen) the old trouble came on again, at first in a peculiar form. I had grown very rapidly and I was very tall and lean. I got the idea that my shoulders were too narrow and the idea tormented me. I would look on every possible occasion to see my image in mirrors, in store windows, and I asked everybody's opinion. I would convince myself that I was all right, which would satisfy me for an hour or so, and then I would circle through the same old chain of thoughts and worries about my shoulders again and again. I soon began to have attacks of the old type which displaced the shoulder affair. This continued off and on for a year. Then I left the business world to enter the Institute of Technology. (Age, eighteen.)

"Again I had a long period of well-being which lasted for four years. I was absorbed in and enthusiastic about my work and ambitious to win scholarships.

I had during this time a few isolated attacks, as for instance, upon visiting Coney Island for the first time, but in general I enjoyed vigorous health until near the end of the fourth year. At that time I had a severe pressure on the top of my head, probably from overwork during the preceding years. Towards the very end I had one or two attacks, but they were light and left no after effects.

"Immediately upon graduation I left Boston for San Francisco to accept a position as a teacher. On the way west I stopped over at Philadelphia, Washington, St. Louis Exposition, etc., and at each place had terrible attacks. As soon as I was located in San Francisco I was free from them again for nearly a year.

"Toward the close of the San Francisco year, which had been an exceptionally busy and hard one, I began to get attacks regularly in the evening, and in particular situations. I had been well for so long that I paid but little attention to them. I was then sent to Germany for two years by the M. I. Technology for advanced study. I sailed with my wife and Dr. C., for what should have been the best years of my life, but they were spoiled by continued attacks and depressions.

"I couldn't go out to walk at night in Berlin without an attack. The same was true at Zürich. In the mountains during vacations it was the same. A week of peace and then two weeks of depression, worry, and attacks. I brooded over my condition and grew steadily worse. I consulted Dr. Von Monakow and just before returning home, Dr. P. Janet. These were my twenty-fourth and twenty-fifth years.

"I was given electrical treatments, baths, diets, etc., but to no avail. The idea, 'what am I' no longer concerned me, but the attack was so strange, so unusual, so uncorrelated, so mysterious, and so terrifying, and

fearful! I could get no satisfactory idea about what it was or what caused it. Consequently, the after effects of an attack were prolonged for days by brooding and fear concerning them. I was simply waiting for them to stop in the same mysterious manner in which they apparently had come.

"One day in France I fairly shrieked with the pangs of fear with which I was seized without apparent cause.

"I returned to Boston (age twenty-five). For a few months after my return I was somewhat better under the stress of new conditions. But I soon fell back into the same rut. The steady depression and worry between attacks were wearing upon me.

"After visiting several physicians, with very little if any benefit, I visited Dr. Sidis. He threw an entirely new light upon the whole affair. It has taken three years (age twenty-five to twenty-eight) of persistent work with me to break my old habits of mind concerning myself and the attacks. By completely changing my attitude toward myself, my condition and my attacks, by furnishing me with a new point of view, Dr. Sidis has caused the trouble to be robbed of its terrors, and the attacks to dwindle away.

"From my point of view the main steps along the road of improvement with Dr. Sidis were as follows:

"It was a revelation to me to be told when I first described an attack by saying that my 'personality was gone' that I 'lost myself,' that *that was meaningless except for a state of unconsciousness*, that it was only a panic of fear which overcame me and which paralyzed my sense of reality or familiarity for a very brief interval. 'Granted a second modification of personality—what of it? What a small fraction of one's day after all, if only the after-worry be suppressed.' That was an extremely new idea and a powerful tool for me. It robbed the attack of most of its mystery, for

it was now merely a temporarily modified 'me' in a state of peculiar fear, and not a mysteriously lost 'me'. '*I was there all the time.*' 'Only a very small part of the great complex of personality is affected during an attack,' was a powerful sentence for me.

"I soon wanted to know the cause of these sudden onrushes of fear which came without apparent cause. Might not Dr. Sidis be mistaken? Might they not be due to something organic about which it was best not to inform me? I think nothing but months of consistently repeated answers to my torrent of questions could have persuaded me about these points. Had I been able just once to get the upper hand of the argument, all would have been lost.

The critical answers were—(1) It can't be organic or how could the event of the attacks depend as they do upon exterior surroundings. (2) The fear is due to a series of events in early childhood, which events were traced down in the hypnoidal state and by long periods of reflection on my part. It seems reasonable and probable, since the personality of a child is not very rigid and depends largely upon familiar surroundings for its normality, that the peculiar manifestation (the attack) might at first be entirely due to fear. I still remembered continued events such as the night errands with accompanying attacks immediately forgotten upon return home which assured me of this point. It is easier to understand repetitions, if the first ones are explained.

"The first attacks, then, are the result of childish fear. The sensation was so unique that it seemed mysterious. It was like a taste of another world. So long as it seemed mysterious it was brooded over, deemed all-important and exaggerated, until it occupied the whole mental horizon. As soon as it was robbed of its mystery and regarded as a brief acute fear state which manifested itself acutely, because of having be-

gun in an undeveloped personality of a child, it was robbed of its sting of terror.

"Another important point which I have lately begun to appreciate is as follows: Since these attacks were for so many years associated with ideas of mystery and enormous importance, the slightest trace of one arouses a flood of emotion. These emotions are anxieties and fears, and are due to their frequency of repetition, they now come with tremendous momentum. Sometimes the anxieties and fears come without the attacks. The temptation is to start thinking about my condition, revolving in my mind much of my history in connection with the attacks. It seems as if there must be something more behind which could be thought out, and which would satisfy me, if I could only grasp it. If I yield to this temptation, I soon have a cloud hanging over me which persists for days during which I am subject to attacks. The mere remembrance of my previous condition which often strikes me with great force after a period of well-being, as when one suddenly remembers something of importance which has been forgotten, is enough to start me off, if I yield to the temptation.

"The point is not to yield to that critical moment. Put it off for a few minutes. Then the flood of emotions has passed away, the matter is considered reasonably and calmly, and its importance is gone. It doesn't seem worth considering then. Dr. Sidis has made this possible.

"Sometimes the thought that, although I have practically all my life been subject to these attacks, yet they have not interfered with my career, which has been an unusually full and busy one, satisfies me that they cannot be so all-important and worthy of much attention. This reflection has at times a soothing effect, and often is just sufficient to enable me

to keep from meddling with the affair until I work myself into a state of depression.

"It is important to understand that the severity of an attack, the determining factors as to whether it 'takes hold' to cause its terrible wake of after effects or not, is largely what I put into it at the time of its recurrence. Like most phenomena, these attacks always have an immediate and a remote cause. In the beginning the immediate cause was fear induced by unfamiliar surroundings, darkness, etc., inducing a fear which in an undeveloped personality of a child gave rise to a sensation of disconnected or lost self. The fundamental cause which made this possible was my fearful, anxious, mystical temperament, due to my manner of bringing up. This is illustrated by the case of a very young child first hearing thunder. Whether or not it will leave vague fears of that apparently terrifying and mysterious sound for ever after, depends largely upon the attitude of those older persons present when it is first experienced.

"This temperament is like the fuel or gun powder, while the immediate cause is like the spark, in the case of an explosion.

"Later on (age thirteen-seventeen) the same immediate cause, i. e. darkness, etc., would not induce an attack. Peculiar special surroundings or subtle suggestions, certain trains of thought or effects of light (reminded [?] me of the early attacks) and induced new ones. These induced attacks might be consciously self-induced, consciously externally induced, or subconsciously induced. Most of them were the latter, and came suddenly. During this period, however, the attack visited a different personality. It seemed strange and mysterious, causing the thought, 'What am I.' This the simple mind of a child could not add to the brief attack proper, and it soon was forgotten.

Now, however, (age thirteen-seventeen) these new thoughts and attendant fearful emotions were habitually indulged in after an attack, and they made a different attack of it. At one interval it seemed that the thought,'What am I,' preceded and caused each attack (age thirteen).

"Recently (27-8) the immediate cause of an attack, when it is not purely subconscious, is subtle effects of light, the confusion of a crowded street, etc. This causes a peculiar sensation to be experienced which, when not understood, is very frightening, that of changed connection between mind and body, as if the body were operating without the control of the mind, in short, a change in personality. The effect is now upon a very different personality from that of old. It is the same picture on a different background. The attack visits a new, older, more experienced and stabler personality. This present personality realizes the history of its development and that of the attack, and of its habits of fear and fright, due to its attitude of mystery toward the attacks. Consequently, it now does not regard the attacks as fearful or mystical. The result is that the sting and the after effect are gone and the attack seems unimportant. It is no longer a fundamental question of 'What am I', bound in feverish, mystical anxiety, but an explained panic of fear, overwhelming only for a fraction of a second, due to childish experiences and habit.

"The whole matter may be summed up in three words *Fear*, *mystery*, and *importance*. Natural instinctive fear starting in childhood was the early origin of the attack about which, as time passed, a network of mystery was woven. While mystical and not understood, the effect seemed all important and was given a tremendous amount of attention of the vague, anxious,

fearing, emotional kind, which further cultivated the attacks.

"The attack proper has always been quite uniform in its nature, but it has been surrounded through twenty years off and on of practice with great quantities of moss. This moss varied in kind and quantity, and is the real source of trouble. So oft repeated has the attack and its after effects of worry, etc., been, that this worrying tendency has acquired tremendous momentum.

"The important cause of suffering has not been the brief attack itself, but it has been the after effect of fear and worry. It has been the attitude of my personality toward this brief acute sensation which has built a fortification of mystery about it, so that it has become more oft repeated and apparently more intense. More and more possibilities of suggesting or inducing an attack were on hand the more I brooded about it and the more strange things I connected it with in my thoughts.

"While young and with a simple mind, I saw nothing special in the attacks and they were readily forgotten. As my mind developed I regarded them in ever so many new ways, and particularly from the view-point of the fearful and the mystical. This aroused new emotions, and the study and worry were repeated and repeated, always resulting in fresh depressions and attacks, because no satisfying conclusions were reached. The more this continued, the more important the attack seemed, and the more channels to suggest the sensation were opened to me.

"Only recently, with a clear conviction that the first cause was fear, that the chief fuel had been mystery and my own attitude, has their importance waned, and with this the whole matter is gradually losing itself in the stream of now apparently more important matters."

The history of this case written by the patient from his own present standpoint needs no further interpretation. For, as the patient clearly realizes it,—fear and mystery are at the basis of his trouble, as, in fact, they are at the basis of all psychopathic maladies.

E

I

Patient is a young man of twenty-seven years. His parents, though slightly neurotic, have reached a good old age. Patient is physically well. Since early childhood, as far back as the age of eight, he has suffered from intense melancholic depression, often reaching a state of agony. He is obsessed by the fear of having committed the unpardonable sin. He thinks he is damned to suffer tortures in hell for all eternity. He keeps on testing any chance combinations, and if his guesses turn out correct, he is wrought up to a pitch of excitement and panic. For it is to him a communication coming from an unseen world by unknown mysterious powers. Diagnosed as "paranoidal dementia præcox," the patient was committed to an insane asylum, from which he was subsequently released.

"The omen testing," he writes in his account to me, "had a monstrous growth. The tests have been concerned with the letters in my reading, with people walking on the street, with carriages and automobiles, fire alarms, sounds of all kinds, the sound of the voice and of birds, hymns in church, the weather, the arrangement of letters in conversation, etc. The general principle has been the same throughout, which is briefly this: If the normal course of events is interfered with in a special way that I arbitrarily arrange in my mind before the happening, I infer, or rather fear, that it is a signal from some extraneous intelligence. As to a

signal of what, that also is arbitrarily arranged beforehand. For instance, I considered it was not the normal course of events to be able to predict on what day of the week several people would arrive at the hotel, and still I predicted it. I feared either that I had a supernatural power of prediction or that the people themselves were in some supernatural way forced to fall in with the day I predicted."

The attack proper comes in pulses of brief duration followed by long periods of brooding, depression, and worry. The primitive fear of danger and death, and the sense of the mysterious, cultivated by his religious training, reached an extraordinary degree of development.

Among the earliest memories that have come up in the hypnoidal state was the memory of a Sunday-school teacher who cultivated in the patient, then but five years of age, those virulent religious germs which, grown on the soil of the primitive instinctive fear and the highly developed sense of the unknown and the mysterious, have brought forth those poisonous fruits which now form the curse of his life.

Another paragraph from the patient's account: "It is difficult to place the beginning of my abnormal fear. It certainly originated from doctrines of hell which I heard in early childhood, particularly from a rather ignorant elderly woman who taught Sunday-school. My early religious thought was chiefly concerned with the direful eternity of torture that might be awaiting me, if I was not good enough to be saved.

"*a.* To sum up briefly an account of the fear which is the bane of my life. The most general way to express that fear is to say, it is a fear of some dreadful calamity happening to my conscious self after death. That is to say, a fear that my present suffering will continue or something worse, perhaps infinitely worse,

will come. This feeling is always very closely allied to the early theological doctrine of hell.

"*b.* The intellectual processes leading up to this fear are two: first, that I may deserve this punishment at the hands of justice, on account of failure to attain the moral standard which is required of everybody who knows enough; second, that I am receiving communications from discarnate intelligence, confirming this fear.

"*c.* Taking first the idea of moral failure, it seems to me that God, justice, or whatever you choose to call it, requires from every individual who is intelligent enough, a certain standard of goodness or morality, failing which the individual suffers corresponding to the magnitude of failure. I believe that I have failed to reach this standard to a very great degree and am so continuing, for I am constantly neglecting the duties around me which other people have the moral courage to do.

"*d.* Taking up the second point, that of spiritual communication, I must admit that the general principle seems fundamentally irrational, and yet many highly intelligent men of modern times admit the possibility of communication with the spirits of the dead. My difficulty in this respect is that the results I get from testing, while not intrinsically impossible or miraculous, are such that it is difficult for me to explain them by chance or anything else other than outside intelligent design."

E

II

I give here some of my clinical notes of the case:

When young, patient used to think of eternity; got it from the "old teacher." Wondered that things should have no beginning and no end. Connected it

with hell, in that maze early fear began. The patient thinks that the idea of "endless" was at that time his great trouble.

Had dream: catching dogfish, fish horrible, snake-like; men ridiculing him. Snake and dog—horrible experience which patient undergoes. (Patient has fear of dogs, his mother too has it.) Snake-serpent-devil, damnation-feeling, devil is damned, he is the devil.

Testing in dreams is rare. The testing of respiration in conversation does not enter into dreams. Guessing in odd or even numbers may come up. Memorizes letters, odd and even letters, and tests them whether odd or even, beginning of sentence or middle of sentence or fifth letter. Sense of depression in dreams expresses itself in the form of damnation.

In the church, if the 40th letter is *t*, it is confirmatory, so it was, the 20th *s*, the 12th *o*—confirmatory. From church took hymn-book—the 70th will be *d*—found word "diadem."

Fear of death, of the unknown, of the consequences of damnation.

In conversation with me, while I talked to him about his state of fear of damnation and testing, he kept on testing the letters of my conversation, "whether the fifth letter of my words will be a certain letter?"

In the hypnoidal state very little testing is done.

Told me of a superstitious fear that when parents went away they will not return, not that they will meet with an accident, but that they will simply disappear. It was not a natural fear, but a superstition. Then if such a thing should happen it would be a sign of "divine wrath." The fixed fear was tenacious. If parents went away with other people the feeling was not so intense, because they (the parents) could be traced naturally. It is only the mysterious that appealed. In school looked out of the window to see carriages, may-

be parents disappear. When left alone, "solitude," or with stranger, something terrible may happen. (Compare other cases.) Kept up this fear until twenty.

When very young, parents went away, left him with servant, cried very much. Went to sleep. When they returned, he woke, but he thought he was dreaming, not real. Was about six years old. The fear instinct developed. Damnation was torturing in "fire," all alone in solitude and away from parents (natural childish fear). *Hell is to be all alone in a dark place.* Had fear of walking in a dark room without having helping hand or some object—was afraid he may go on so to *eternity*. Even the year before, when in "Wonderland," had to go through dark tombs, fear had been resurrected.

The fear became occasionally exacerbated by the different forms of testing. Then employed dates and letters as a test. The date is even or odd.

Dreamt I was in his dream, spring was coming, birds would come singing, patient testing their song on expiration and inspiration. I told him something, could not remember at first what, "was worried about testing, I explained him the insight of it." It was some actual physical disturbance, superstition, strange. There was a feeling of oppression—the same as waking depression.

Between eight and fifteen liked excitement, but then the excitement made him think he is diabolical.

Dreamt he was in a boat with religious people discussing about God, resurrection, and damnation; saw figures computing the time between now and resurrection; the people were Universalists. The Sunday school teacher used to dwell on the length of time to resurrection, a day being a thousand years.

I said "I shall subject all that to test to see whether it is true or false." Came across a phrase relief to him:

the present fears are realized. Always sees the same phrase, sees it always the same day in the week. This must surely have "a meaning", keeps a diary. Found that the phrases occurred on Tuesday. Still the probability is one in seven. Then continued testing in other ways. He kept playing the chance-game. Could not attribute results to mere chance. Now he keeps on testing nearly all the time in relation to the condemnation. Came down to odd and even, got so that he must follow it up.

Before he conceived the idea of blaspheming against the Holy Ghost he used to go over in his mind that he was not good during the day, making decisions of being better next day. The people around him used Biblical testing. There was an atmosphere of religious and other superstitions in the place. Mother superstitious. Mother used the Bible, opening it to test the outcome of events, especially when in trouble. Even last summer mother showed him verse which just came by opening the Bible; the verse was very favorable. Bible stories hammered into his head. When rain, was afraid of flood.

When about the age of nine, a fear, a horror used to come over him, it was intense, awful. This came on suddenly, more real than usual, so intense that it could not last, reaction; this occurred before testing was systematized at Harvard (1902, age twenty). Was very depressed; then the phrase "worst fear true," then in reading the worst came which is unusual. Seemed significant—origin of testing, felt at the same time that the testing was "absurd and even dangerous." Depression partly ascribed by patient to homesickness, and keeping away from people and friends,—loneliness in a crowd. Did not take an interest in his work. The fear became overwhelming, when passing a sand heap each unit meant a year of damnation; when near a

hot radiator thought of the "fire of hell." Any depression emphasized the fear of "damnation." Had to use resisting power to the dominant idea. Anything of a depressing character hardly diverted his attention from the "fear." Now the "testing" shows that he is in a constant state of doubt and indecision.

The indecision manifested itself by constant delay. "Good resolutions the curse of my life." Makes no resolution.

About four years ago when tired and depressed a fearful feeling of unreality came over him.

Often dreams of seeing dead people, because of experience of being buried alive, also connected with his ideas of sin and damnation.

Testing as to whether he could suffer vicarious suffering when about the age of sixteen. "Sacrifice myself for others."

Dreamt about a funeral (has frequent dreams of funerals). Thinks it was due to the incident he remembers distinctly of the funeral of his grandmother, but does not remember his grandmother herself. Says his dreams are mixed up with death and funerals. The hymn was: "Is my name written there?" which had to do with patient's testing.

The place of fear of the grandmother where he was at the funeral, that place was a "huge hole." This probably helped the formation of fear of funerals, also dreams of burials and resurrections.

Had a dream about salvation. Evidently the subconscious still retains the prejudices. Also dreamt of the death of a friend of his. The dream-experience is of the supernatural. He thinks that there is an experience which he has forgotten, which may account for the whole thing. Thinks he had something of the terrible in it, had great mental "*terror*." He reminded himself that when about six years he had fearful "shak-

ing," terrors on awakening. Used to call them "shaking spells," his folks used to call it the same way.

Father corroborated the patient's story of his spells due to fears.

Begins to dream about testing in sleep. Being aboard on ship, listening to bells.

Dreams much of death. Dreamt of the death of a friend of his who died just about the time when patient was in bad condition. Dreamt that he was to be buried, and still was alive. The whole patient's life hinges on death (experiences of life after death). Something flashed in his mind: "The world burnt up! People lie in the ground a long time before resurrection." His whole childish system is built on life after death, salvation, damnation.

Feels strain in the presence of strangers, thinks lacks vitality. The knowledge of the history of his case not sufficient, must allay fears by other considerations. Tells me he does not feel any more, as if he is a lost soul.

Dreamt of death of aunt, looked into casket, body alive, moved, felt anxiety, when woke up had words "B. M." name of his old early Sunday school teacher who influenced him strongly in his religious life.

The details of the "dream death" keep on varying. Had experience of funerals, saw one brought out through window, because the door was too narrow.

The "test dream" which he has besides the "funeral dream" is more depressing than the "funeral dream," because the first deals with himself, the second with others, and yet both are connected with his general fear of damnation.

I have to discuss with him on "sin," "suffering," "adjustment to life," and other metaphysical and theological subjects. Alphabet is expressed to him in number. Has attacks when the testing comes.

Has dreams of false recognition, saw friends whom he

recognized in dream having known them, turned out he had never seen those faces.

Patient begins to improve, indifferent to testing for some intervals.

Feels well after a series of relapses; but dreams about Waverly and does testing, wakes up with relief. Begins to experience enthusiasm about his work.

After a couple of years of persistent treatment by means of the hypnoidal state and methods of association and disintegration of the active subconscious systems, the patient recovered. He entered a well-known medical school and took a high rank among the medical students.

E

III

The following history is an account written by the patient:

"I propose here to put down, as far as memory serves me, a detailed account of my early impressions which resulted later in a very troublesome mental condition. My recollections of this early period are rather hazy. As I remember it, the first person to present religious themes to my mind was an ignorant woman who lived about one hundred yards from the home where I was born and brought up. She was a middle-aged or elderly housewife who had a crudely religious turn of mind. She used to hold family prayer meetings where prayers were said and hymns sung. This woman was a great smoker of a blackened clay pipe. It was principally through her grandchildren that I became acquainted with her. In her efforts to bring her grandchildren up in the straight and narrow way she quite naturally sought to include their young friends of whom I was one.

"According to my memory, the very first time that this woman, or anybody else, broached religious subjects to me was one morning when I was in her house. I will relate the exact incident as my somewhat foggy memory recalls it. I had gone into her house, for what reason I have no idea. She asked me if I supposed I should always go on living just as I was. I suppose I said 'yes.' She said 'no,' and then went on to tell me of death. Had she stopped at that, it would have not been so bad, but she went on to tell me all about the rising from the dead and the frightful judgment which followed. The good went to heaven, of course, but the wicked (as I remember it 'wicked' was a favorite word of hers) were burned up. Of course, painful fire and brimstone were to be visited on the 'wicked.' From what I know of the woman's character, I have no doubt she added to the grewsome tale many a hair-raising detail, but I do not definitely remember much of these. I do remember one thing plainly; she said those who went to heaven would not be able to take their money or their goods with them. My old schoolhouse was directly opposite this woman's house and I have a dim recollection of being in the playground of the school very soon after my conversation about the future life and still thinking over the situation. It is hard for me to say how old I was at this time, but I should estimate five years.

"I suppose the woman's doctrine was perpetuated, if not amplified by the grandchildren and other proselytes who received it at the same time that I did. My brother in particular, who was four years older than I, I think was impressed by the current religious doctrine and he naturally might have thought it his bounden duty to instruct me.

"Another source from which I imbibed of a similar decoction of ideas is my early Sunday school. The

influences which I came under were undoubtedly more generally intelligent, but the theological doctrine was, I think, not cheerful to a child's mind.

My Sunday school days do not leave a pleasant flavor in my mind. I have a Bible that was presented to me, for committing to memory the Ten Commandments, by the Sunday school teacher. I was just eight years old at the time this Bible was given. I know this positively by the inscription in the front. I think, however, my Sunday school career had preceded this by some years. Through this period my idea of religion was a nightmare to be kept in the background as far as possible. The whole purpose of life was to escape hell at the end.

"I cannot be sure of what I am about to say, but it is my impression that so far as I broached to my family my ideas of the dreadful doctrine, they did not attempt to rid my mind of it. I was naturally rather secretive with my thoughts and they had no means of knowing the damage that was being done. They probably took it as an evidence of early piety, and thought it was more or less healthy.

"Another source from which I imbibed some 'orthodox' doctrine was that of revival and evangelical meetings which were sometimes held in the hall over my father's store and other places. There was in particular one woman evangelist who used to come around occasionally, preaching the immediate ending of the world and the day of judgment. I think she sometimes had the exact date figured. While my family ridiculed this woman, and had but little sympathy with the other evangelistic seances, still I was more or less impressed with the *possibility* of there being some truth in the matter. With so dreadful a thing as hell in the balance, any possibility at all was enough to make one take notice. I remember that one day this woman evangelist (she was a Seventh-day Adventist)

undertook to prove to my father in my presence the date on which the world would end. She took certain numbers from the Bible and apparently made certain combinations, the result of which proved conclusively that the day of judgment was at hand.

"In all my early religious experiences it was always the doctrine of hell that stuck in my ears. Everything else was so insignificant that it made little impression in comparison. I am inclined to believe that this fear was gradually stamped on my mind. I do not think it was due to any single impression or impressions. First came the old woman's doctrine, the woman who smoked the pipe, this was confirmed probably by her grandchildren and other playmates who had received the same ideas from her or others of her stamp, then my home and Sunday school teaching, and last of all the revival meetings.

"One abnormal trait of my childhood was the undue fear and emotion which the absence of my family caused. Unless the entire family was involved, the emotion was very much reduced, if not altogether done away. The fear was that some terrible accident could happen to them, and that I should be left alone. In this emotion a certain sense of mystery was required, generally, to have a strong effect. If I knew just where my family were and whom they were with, this emotion was greatly reduced. I think the most exciting thought was one of disappearance rather than of accident, a vague notion that once my folks were out of reach, even for an hour or less, they might in some mysterious way disappear and I would be unable to find them or trace them. As I have said, if one member of the family (there were three altogether, father, mother, and brother) was still with me, then the excitement was very much lessened, though there was still an abnormal concern lest something should happen

to the absent one or ones. However, then I should not be left a lonely survivor. And again the emotion was much less if some acquaintance was with them in their absence, for then they could be traced. In this way the idea of mysterious disappearance was more or less disabled, for mysterious disappearance did not apply to anybody but my father, mother, and brother.

"Naturally, other things being equal, these emotions concerned themselves more strongly with my parents than my brother. I have spent many hours of anxiety in the country school where we lived worrying, lest I should find the house empty when I got home from school. Of course, frequently my folks would be out, then the immediate task was to locate, if possible, where they had gone, by examining the wheel tracks out from the stable, asking neighbors, etc. To know where they had gone, even, was a gain. This abnormal habit of mind was very persistent. It gave me no little trouble when I was in the 'teens, and to this day it will sometimes crop out as an emotional anachronism.

"For a time in childhood I had the obsession that I could not swallow beefsteak. If I chewed potato, however, at the same time with the steak, I had no difficulty. If I went out to visit with my parents and steak was served, unless potatoes were promptly served along with it, there might be trouble at the table. For a period in childhood and again for another period at about twelve or thirteen years, I had a morbid fear of poison, a fear carried to fantastically absurd lengths.

"At the age of eleven or before, I began to be troubled, for the first time, with a perfectly definite religious fear. Hitherto my religious fears had been general. At the time I began to fear that I had committed what the Bible speaks of as the unpardonable sin or blasphemy against the Holy Ghost. I had actually made some remark about God which I afterwards feared

might be blasphemy. Here was a definite reason why I should be damned. All other sins could be forgiven, but never this. At this time I think I was eleven and a half years old. My mental disturbance at this time was great. This particular idea persisted for a long time, but now other ideas began to crowd in thick and fast even before this one disappeared, all leading up to the same ultimate fear, damnation.

"There were many different theories formed as to why I was in danger of damnation between the age of eleven and sixteen. A playmate of my early life had died of a somewhat mysterious disease. I used to tease her, and now I feared that in some way I might have caused her death and was a murderer. In my morbid fear of poison I had subjected other people to frightful risks of being poisoned to death. My early sexual imaginings perhaps had been a deadly sin. The ideas in connection with poison were very troublesome in this connection. I did not suppose I had actually poisoned anybody, but since poison was on my clothes, hands, and possessions, I was constantly subjecting the people around me to great danger, and I did not have moral courage enough to warn them of this danger, because I had a sort of idea the poison theory was foolish. Still this lack of courage to warn them was a source of untold anxiety, lest on account of it I should be doomed. I, of course, knew the danger of poison and could and did avoid it, but to endanger the lives of poor unsuspecting people was a hideous crime. I cannot remember all the theories that entered my mind leading to the fear of hell. They were manifold. When I was sixteen the foremost one was a fear that my faith was not sufficient for salvation.

"This fear of lack of saving faith very soon gave place to a general idea which proved to be permanent. The idea was this: that if I was called upon for an

exercise of great self-sacrifice for some very great necessary purpose, my moral courage, or perhaps physical courage is the better term, would prove so far below the required standard that in consequence I should be condemned. Whether the occasion for a display of sacrifice arose or not, I felt that the weakness was present. I argued that as a rotten rope is just as weak whether it is ever pulled or not, it did not matter whether I failed to sacrifice in a definite case or whether simply the weakness existed. I could easily think of numberless experiences at which my courage stood still and shuddered. To be sure, there was no probability, perhaps no possibility, of my being called on to choose such an experience, but suppose some enormously great cause, outside of myself, should demand such a sacrifice, some cause so infinitely greater than my bit of suffering that the two could not be compared. This fear of lack of faith and courage tortured me.

"During an attack of measles, contracted in college, my mental suffering was acute.

"Having once initiated the principle of receiving supernatural information, the means of applying this system had no bounds other than lack of ingenuity. At first the omens were not significant unless the nature of them had some apparent meaning, having to do with damnation. But after a time this property of direct significance was not necessary to make the omen valid. For instance, a few months after I had got over my attack of measles, I made the following test: I said, mentally, that if several people (designating the particular ones) of the persons who were coming to the hotel where I was living should arrive on a Tuesday, I would regard it as possibly a revelation confirming my fear. Of course, I recognized that there was not the slightest connection between the arrival of persons at the hotel

and my salvation. I simply figured this method as an arbitrarily arranged means of conveying information from some spiritual individuality to my individuality, just as the dots and dashes of telegraphy, meaningless in themselves, have a purely arbitrary meaning. As a matter of fact the first two arrivals at the hotel that I had put in the test did come on Tuesdays, though I had made the test weeks before they came, not knowing anything at all about their plans beyond the simple fact that they were coming. In the case of one arrival, I had one chance in seven of getting it right by coincidence, and as I hit the first two, the chances were one in forty-nine that it might have been mere chance. This caused another period of intense mental distress, but another one of my arrival tests failing, I was immensely relieved and assumed as well as I could that the other hits had been merely coincidence.

"The tremendous emotions raised by these stormy periods stamped the tendency so deeply in the brain that the deadly habit was slowly getting a firm hold on my mental life. The word 'deadly' is not too strong to apply to this tendency, for it has been a withering blight on other activities.

"I became afraid to go much away from home, or at least to get out of touch with home, for the fear connected with the testing had been a terrible thing even when I had been surrounded by my family and friends, what would it be if I had to meet it with only my own mental resources which were absolutely demoralized? The presence of my own people and intimate friends who tried to show me the error of my fears was a great palliative, even though they could not absolutely persuade me that I had nothing to fear.

"This habit of omen testing has had a monstrous growth, continuing into the present. As to the details

of arranging the tests, without exaggeration, it would take volumes to report them, for they have been interminable and constantly changing. They have been concerned with the letters in my reading, with people walking on the street, with carriages and automobiles, fire alarms, sounds of all kinds, even the sound of the voice and of birds, hymns in church, the weather, the arrangements of letters in conversation, etc., etc. Having accepted the principle, it has been simply a matter of ingenuity to apply it to any form of activity or inactivity whatsoever, and if the variety and intricacy of this testing system is any measure of ingenuity, I have good reason to be well puffed up with conceit.

"The general principle has been the same throughout, which is, briefly, this: If the normal course of events is interfered with in the special way that I arbitrarily arrange in my mind, before the happening, I infer, or rather fear, that it is a signal from some extraneous intelligence. As to a signal of what, that also is arbitrarily arranged beforehand. For instance, I considered it was not the normal course of events for me to be able to predict on what day of the week several people would arrive at the hotel, for I feared either that I had a supernatural power of prediction or that the people themselves were in some supernatural way forced to fall in with the day I had predicted.

"This testing went on with varying intensity from the time it started at the age of about nineteen or twenty and is still continuing in one way and another. During these years my activities have been greatly hampered. I have stood in such fear that I have spent my time for the most part with my family, dreading to take any step at all that would increase my emotion. Any definite idea of starting out on a career of any kind has never even been seriously entertained. I have realized that the problem has only been dodged, not

settled, by this course, but it was better to stay in the frying pan than to jump into the fire.

"After all, I date the last and present phase of my troubles from last May, just about a year ago. At the beginning of May a year ago I was in fairly good condition for me. I was not aware that my mental disorder was very different from what it had been. To be sure, I had observed that the testing had been growing more extended and troublesome, but there had been times in the past when it had been extremely troublesome.

"I will describe in detail, as well as possible, the beginning of the last stage in this miserable business. I was destroying some old letters one morning which I had had stowed away for years. They were in tied-up packages, each letter dated on the back. A strong idea of making tests on those dates suddenly took possession on my mind, so I took one of the packets of letters and predicted whether the date on the top letter would be an even or an odd number. Having hit the top number right, I continued down through the packet, and it was some little time before I made a failure, though there was apparently no natural means whatsoever by which I could foresee the dates. I had not looked over these letters in years, and there was no systematic arrangement as to dates anyhow. It might have occurred by coincidence, but the chances were large against this. This circumstance aroused a good deal of apprehension and as usual in such cases, gave the testing fresh impetus.

"I began immediately to make other tests some of which seemed to defy the laws of chance. Within a day or two I had a result in testing on the dates of some post-marks which to this day I regard as phenomenal. At this time nearly all the testing was done on things where the chances were about even

of my hitting or missing, therefore it was not the individual times that the test came out as I had predicted that made the impression on my mind, it was the series which piled in succession. This odd and even testing was the result of a long evolution. At first I made tests where the chances of my getting them right by ordinary coincidence were very much smaller. There were plenty of individual failures now, but in spite of these, there were results that I could hardly reasonably attribute to chance. I got new points of view, which I had not had before, and which lead me to see in a new light how contrary to the laws of chance my testing came out. And now my testing began to branch out amazingly, and began to involve all my activities.

"It was at this time that I first went to Dr. P. He asked me if there was anything that I would like especially to do, and I told him I should like very much to go to visit some friends in New York. He said "go and come back here, if you don't feel better." It may appear strange that I should have wanted to go away from home at a time when my emotions were most aroused. The explanation is this: I had been visiting these same people in New York the preceding winter, and had grown to be very fond of them. They were intimate friends, so much so that they seemed more like my own family than mere friends. Therefore, I was rather going from one home to another than going away from home, and moreover, the home I was going to had apparently been better adapted to my mental state, for I had got along there better than I was now getting on at York Harbor, my permanent home.

"I did not have the courage to make even the short railway journey to New York alone, but insisted on my mother's going along. She did so and returned

in a few days, leaving me with my friends. At first the change seemed to agree with me, but only very briefly. I now went rapidly from bad to worse, and my mental suffering became really terrible. It was the same fear of supernatural suffering intensified. I was in New York nearly a month, growing worse. I was simply a mental fragment of myself. Activity was pretty much at a standstill, though sometimes after suffering the limits of agony, there would be a mental reaction and I would feel better temporarily. The whole theme of the trouble was *fear-testing*. New forms of this arose. At this time one of the most troublesome forms, which had its beginning then, was a test on sounds with respect to the inhalation or exhalation of my breath. If sounds, such as whistles, bells, or any other arbitrary sounds, reached my ear at that period of the respiration that I had predicted it would come at, it was ominous to me and intensified my fear. Sometimes I had almost paroxysms of fear at the times when the tests seemed to be certainly directed by some intelligence other than my own. My friends were good to me, and without the presence of some people like these or my own folks, I cannot imagine how I could have got through such a period. I say period, but it was simply the beginning of trouble.

"In June my brother came to New York and took me home. Here my sufferings continued. Still newer forms of testing arose which restricted my activity still more. All manner of work I renounced, and as for recreation, the testing and great suffering put a stop to that. Sometimes I lay in bed nearly all day, for there was nothing else I wanted to do, and furthermore, I could get away from testing better this way, for I would not have to see any printed letters, and I could muffle my ears somewhat with the bedclothes to prevent my hearing sounds to test on. It is impossible

to convey to the mind of any individual the horror and agony that I experienced. To say that I was beset with extreme fear means nothing to the normal person's mind, for the greatest fear he can clearly imagine is perhaps to be chased by a lion, to fall off Brooklyn Bridge, to lose all his property, or to lose some dear friend by death. Any of these are calamities, but to compare them with the wild terror which I felt makes them insignificant.

"This state of affairs continued till some time in July, when my consent was most reluctantly obtained to go to the McLean Hospital, at Waverly. My brother had been advised by Dr. P. that I should go to a hospital (afterwards Dr. P. said Waverly would not have been his choice). I had reached such a state of despair that the prospect of having something done for me raised a faint aura of hope that perhaps I could be relieved. Furthermore, the McLean Hospital did not present itself to my mind as being really a private insane hospital. Dr. A., who had been looking after me as well as he could during these fearful days, had told me that there were two departments at the hospital, one for insane cases, and a separate one for nervous afflictions, and that I was going to the latter. He said distinctly that there would be no confinement. Perhaps he thought he was telling the truth, but whether or no, I do not blame him, for he and my family were at their wits' end and were completely demoralized.

"Accordingly, one bright July morning I started out for Waverly. I believe it is the Lady Macbeth who says 'So foul and fair a day I have not seen.' That is not inappropriate here. I signed a voluntary commitment somewhat unsuspectingly. Thirty minutes after I had signed I would have given all my possessions and much more if I had not signed. My brother and one of my New York friends had accompanied me to

the hospital, and on them I used what powers of argument I possessed to induce them to believe this was not the place for me, but quite naturally they took the opposite view. I spent four days there. It is useless to attempt to describe my fear agony during this period, for its intensity baffles description. Enough to say that I was thrown suddenly on my own resources, unable to read or do anything else, fearful of every whistle, the slamming of every door, made tremendously afraid by conversation, not only because it was a sound, but from the arrangement of the letters. I would walk around the circle of the yard's liberty, then lie abed as long as I could stand the agony, then walk. I doubt if I was sensible to ordinary physical pain at this time.

"The suffering was all that the crude conception of the inferno would ask for, therefore the feeling grew that it was hell and might continue. The idea of spending a lifetime there was unendurable, but in addition to that I was afraid that I should be unable to die, and live on indefinitely, get to be sixty, seventy, eighty, a hundred years old, and still not relieved by death. I doubt whether such excess of mental suffering can be experienced without leaving permanent scars in the nervous system.

"During the four days I was at the hospital I was writing letters home which were couched in the most urgent phraseology that my command of the English language permitted. I discovered through the head nurse of my ward that a voluntary patient could give notice that he would not remain, but that before his discharge his people must be communicated with, giving them the opportunity to have him legally committed. I was afraid to insist on my rights, lest I should be committed by law, in which case I knew my chances of regaining liberty would be very much reduced, for I

was afraid in that case I could not be legally liberated, even with the consent of my people. By this time I had little doubt that I was insane, though this realization did not make my fears any the less real to me.

"My father, worried to death by the character of the letters I was writing, sent a physician friend of his to Boston to see, in consulting with Dr. J. P., what was best to be done in the matter. Accordingly, Dr. H. and Dr. J. P. came out to Waverly together, held a consultation with the McLean officials, and decided that I should be removed from such a place. I therefore went home with Dr. H.

"My relief of mind at getting out cannot be expressed. At the announcement I was at first suspicious that Dr. H. might be deceiving me, then I was afraid that some unlooked-for contingency would yet prevent my getting out. It was not till I was outside the bolts and bars that I felt absolutely sure of release. During this period at Waverly nearly everyone showed me consideration and kindness, particularly the head-nurse of my ward who was one of the most gentlemanly young men it has been my good fortune to meet.

"After going home my mental condition was the same as before the Waverly venture. My sufferings were terrific. At times they were so great that I would do nothing but toss and moan on the bed. Frequently after the exhaustive emotions of the day I would be pretty well worn out by bed-time, and the sleepy feeling of unconciousness creeping on was the greatest pleasure of the day. But it was a tragedy to wake up in the morning and realize that it would be fourteen or sixteen hours before I could have unconsciousness again.

"In October I may safely say that I was very much improved over the summer, but still life was hardly worth while living, and, with all my improvement, I was much harassed with my fears. At this time I came

to Dr. Sidis, under whose care I have since been. With my coming to Dr. Sidis this autobiography ceases. I have tried to present an outline of my abnormal mental history, though necessarily I cannot represent it as vividly as it has been present to my mind, and, of course, numberless details have been omitted. From my point of view it is the story of a blighted life; not only that, but a recounting of suffering of the first magnitude, pain such as I believe very few individuals are ever called upon to suffer, and pain which, by reason of its abnormality, very few persons can appreciate."

"In this case the fundamental fear-instinct intertwined with the religious sense of the mysterious, trained in early childhood, stands out clear and distinct. The process of cure was by means of the hypnoidal state and by a long, painstaking, psychotherapeutic process of dissipating the sense of the mysterious and disintegrating the complex systems, reared on the basis of the fear instinct and the morbid impulse of self-preservation."

CHAPTER XV

PSYCHOGNOSIS OF THE PSYCHOPATHIC SUBSTRATUM

THE subconscious working of the fear instinct is clearly revealed in the following psychopathic cases:

Mrs. A. Age 43. Family history is good. Patient has always been in good physical health. Married eight years ago. Has two children, both are well. Patient is possessed by an intense fear of her husband whom she suspects of some heinous crime.

The attacks come in waves, in seizures of brief duration with intense excitement, agonizing fear, palpitation of the heart, chattering of teeth, followed by a long period of depression and worry. When near her husband, she is excited and full of agonizing fear. She feels her husband must have committed something awful. "There is an insurmountable obstacle between us; what it is, I do not know." When finally her husband confessed to her of some escapade of his youth, she was for a time quieted, but soon the fear of the mysterious sin or crime once more arose. The confession did not satisfy her. "There must be something more beyond." This thought keeps on coming to her mind. "It turns like in a circle," as she puts it. She herself is conscious of the predominance in her of the sense of the mysterious. "Even if my husband," she tells me, "should confess to me the most awful of crimes I would still suspect him of worse ones. There is something mysterious. Nothing definite can satisfy me."

A letter from the patient may best show her state of mind: "There is nothing new to tell you, it is the same old, pitiful story, only varied a little from day to day.

I have no rest, not a moment's peace of mind. I lie awake for hours at night, sometimes the whole night, and my days are full of anguish and unrest. I am not able to do anything, not even to read a newspaper. I am truly a crushed and heartbroken woman, and would almost be willing to give up the struggle were it not for the dear little children who are dependent on me. I also want to do my duty toward my husband. The question often arises in my mind: 'What is my duty under these excruciating circumstances? Must I stay here and suffer through the long days and longer nights when there is a way of escape?' Of course, it is my duty to stay, but I can assure you that my courage is taxed to the uttermost. I do not like to cut my husband adrift now that he needs me most, yet on the other hand when I am suffering like that I fail in all the duties of life."

In another letter she writes: "I suffer intensely all the time and there are times when I become absolutely frantic. There are nights when my lids do not close for a moment and I walk the floor in a frenzy of excitement. I cannot endure the struggle. I would rather be dead than to go through the agony I have gone through the past three weeks. I shall undergo the most excruciating physical tortures rather than submit to this intolerable suffering."

A few days later she writes: "My husband went away four days ago, parting with me under circumstances too sad to be expressed. Since he left me I have not been nervous or excited, but I have been lonely and broken-hearted, and in a state of almost complete collapse. Truly my situation is a strange one. I cannot live with my husband, and life seems to be worth nothing without him."

This is a typical psychoneurotic case, the mental symptoms stand out prominent in the patient's mind,

the physical troubles are scorned, nay even welcomed as a control, as a relief from the agony of fear. The patient manifests the inner struggle, the strangeness of the situation, mental dissociation, systematization of the symptom-complex round a nucleus, and periodicity or recurrence of the psychopathic states, all pathognomonic of psychoneurosis.

We may turn to the subconscious dispositions which form the genesis of psychoneurotic states. The patient had a strong religious training with a profound belief in mysterious agencies. The whole family has been Christian Scientists for years. The patient was specially imbued with the belief in one of the main dogmas of Christian Science, telepathic suggestive influences. She has faith in the transmission of evil influences, and is convinced of the telepathic powers of death-thoughts sent by wicked minds, possessed of special mental capacities. As a child she was dreamy, had a love of the mysterious, and obsessed by a highly developed fear of the unknown. She was prone to fears of an imaginative character and always had "the fear of the Lord" on her. The world was, to her imagination, peopled with spiritual powers, unseen forces, and mysterious agencies with unlimited possibilities for evil. Christian Science only made those original tendencies more pronounced and more intense.

This overwhelming mass of associations, dating far back to early childhood has, with all its momentum, become interrelated with her emotions in regard to her husband. This, of course, should be expected, since this relation was the most important in her life; her subconscious experiences and emotions, by the psychological law of assimilation, became transmitted to the mental states which stood most prominently in her consciousness. Thus did the husband get the whole

brunt of the trouble. He formed the centre round which her early associations became crystallized.

This crystallization was helped by the suggestive influence of a reader of one of the Christian Science churches, a lady who was in love with the patient's husband. This Christian Science reader wrote letters to the patient and her father, and tried in all ways, by direct and indirect suggestion, to influence the patient and the family against the unfortunate husband. No wonder that, with all her faith in the mysterious and with all her early training in the belief of supernatural agencies, the patient fell an easy prey to the suggestions of her rival.

When our patient found out that the "lady reader" was giving her "evil influences," the feelings of the mysterious, centred around her husband, became still more emphasized by the Christian Science belief in telepathic influences and transmission of death-thoughts. The suspicions in regard to her husband became still more accentuated and more developed by the confession made by the patient's husband in an hour of trial that he had had a *liaison* with a lady who had borne him children. This shock at first acted, by metathesis, as a modifying control, finally resulting in the fixation of the psychoneurotic fear.

The following letter written by the patient best elucidates the whole matter:

"I met my husband about four years before I married him, though our actual courtship did not extend over a period of eight or nine months, and I doubt if there was ever a more unhappy courtship. It began with an interesting correspondence which continued for about two or three months after which we met, and he told me of his love for me, and his desire to marry me. I had previously grown to care for him, and the one wish of my heart was that he would ask me to

marry him, yet, when he did disclose his affection, that very moment a strange and unaccountable thing happened to me. I experienced a sudden revulsion of feeling. I began to think there was something dark and forbidding about him, and I flew into such a nervous panic that I felt obliged to go away a few days later to recover my equilibrium. I did not promise to marry him; on the contrary, I told him that I didn't think I could, and I meant what I said. The day after I left I received a letter from him, in which he seemed to renounce all hope of winning me for his wife. It was the saddest and almost the most beautiful letter I ever read, and it seemed to me so absolutely sincere and true, that I was completely overcome and felt that I had made the greatest possible mistake in not giving him more encouragement. I sat down at once and wrote him reassuringly, but I soon found myself unhappy, and in a state of indecision again; and this was the history of our courtship from beginning to end. I could not give him up, and if I clung to him I was still unhappy. There seemed to be a mysterious, inevitable force which bound me to him in spite of everything, and almost against my own will, or so it seemed at times. I felt that I must marry him, though I could foresee, in a vague sort of way, the perilous path ahead. The conflict was terrible and in this state of mind, I prayed with all the sincerity and deep earnestness of my being for light and guidance, and a voice within whispered 'marry him,' and I was thus irresistibly drawn into marriage. I decided that when we were married and settled, things would adjust themselves, and there would probably be no further trouble, so I arranged to be married as soon as convenient.

"Perhaps I should say at this juncture that, as soon as our engagement became known, there was open and bitter opposition to our marriage on the part of a certain

person, with whom we had both been friendly, my husband particularly so. She did everything in her power to prevent the marriage and almost succeeded. She made such insinuating accusations against my husband, that my father felt called upon to make a journey of several thousand miles to investigate these charges. After several interviews with her, and after seeing my husband, he became convinced that she was acting from purely selfish motives, and he fully believed in the integrity of my husband. I had every confidence in my father's judgment and believed as he did that the whole thing was a conspiracy to break up our marriage. That problem being disposed of we were quickly married, but the happiness I had hoped for did not come to me. I was in the same nervous, apprehensive state as before and even worse. I distrusted my husband and had vague suspicions of him. It seemed to me that he had done some dark and dreadful thing that he was concealing from me. Sometimes I thought that he had hypnotized me into marrying him. I believed and was encouraged by others to believe, that I was under the hypnotic control of the woman to whom I have referred, who opposed our marriage. At any rate, I had no peace of mind. Whenever I was with my husband, I kept asking him again and again, if there was not something that he was concealing from me. He said 'no.'

"Finally, one day, he admitted that there was something and straightway told it to me. I was very much excited over this avowal, though it was nothing of a dreadful or criminal nature as I had supposed—nothing that could not be readily forgiven, and, in point of fact, I felt kindlier to my husband than ever before, because I knew that it had cost him something to make this disclosure to me, and I was not disposed to resent too deeply his tenderness in so doing. Immediately after this my health seemed to improve wonderfully, and I

was confident that it was the fact of this information being withheld from me, that was the cause of all the trouble between me and my husband.

"My improvement, however, lasted only a week or ten days, at the end of which time I found myself as nervous as before. I believed that my husband had not told me all, that he was still concealing something from me, and I could not get rid of these ideas. We have been married almost nine years, and I have had three children, two of whom are living. During these nine years we have lived together very little, and have never been able to establish a home. Somehow I have clung to my husband and he to me through it all, though at times it has seemed impossible, but 'Hope springs eternal in the human breast,' and so great was my desire to hold my little family together, that I would return to my husband again and again, but a nervousness amounting to terror always seized me whenever I was with him, making it impossible for us to live together.

"When away from him I have been, if not happy, at least peaceful, and able to work and take care of my children. One morning about two months ago, something unusual happened. I received the news of the death of the woman to whom I have herein referred. This news came to me with startling surprise, as she was a comparatively young woman and I could not have anticipated her death. Almost immediately after that I felt a sense of freedom and noticed a change in my attitude of thought toward my husband, and when he was with me recently I felt decidedly better, though not wholly free from nervousness. The change however, has been great enough to cause me to believe that I may have been—probably have been—the victim of a long continued mental attempt to wreck my home and

happiness." The fear soon returned with renewed vigor. The patient had to come for treatment.

This account written by the patient gives an excellent insight into the workings of the psychoneurotic mind.

Mr. M., twenty-one years, Russian. The patient was referred to me for epileptiform attacks on the right side of the body. The attack is of the Jacksonian type. The spasms consisted of rhythmical movements, tonic and clonic contractures of the head, right hand and right leg. The whole right side was affected and anaesthetic. The attacks come annually, about the same time of the year and begin always at midnight. Last year (1903) the patient had four attacks. Even a few weeks after the attack it was possible to discover a difference in the sensibility of the two sides. The attack proper lasted from a few hours to a few minutes and even seconds.

The patient, as it is typical with psychosomatic cases, came for medical treatment of his physical attacks, namely his convulsions and anaesthesia. The simulation of Jacksonian epilepsy was almost perfect. As soon, however, as by means of hypnosis, we began to investigate the patient's subconscious life the whole history and origin of the disease became revealed.

A psychognostic examination of the case shows that about five years ago, when the patient was sixteen years of age, he attended a ball in his native town. After midnight he was sent out to look for a ring which he had lost on the way to the ball. The patient was very superstitious, his early training was saturated with beliefs in ghosts. It happened that on his way he had to pass a cemetery; he got frightened, it seemed to him that somebody was after him. He fell down and was picked up in an unconscious condition and brought home. It is from that time that his present attacks date. The attacks reproduce the

original accident as well as the condition of fear, convulsions and anesthesia of the side on which he fell.

During the attacks he keeps on dreaming about the fright, fall, and about his illness. In short, he lives the original experience over again in his subconscious dream life. While examining him during trance, we happened to call attention to his anaesthesia. Suddenly, as if by the wand of a magician, his past personality of the accident emerged. Mr. M. went into one of his attacks, living over the same period of his life in Russia. He ceased to understand English, and was carried back to his sixteenth year. He cried out in great agony, as of one frightened to death, squirmed and twitched, and began to shake. "What happened to you?" he was asked. "I fell down," he exclaimed in his native jargon: "I got frightened." He then passed through the movements and shaking characteristics of the attacks. When asked where he was, he answered, "At home." "With whom are you now?" "With my mamma." When the attack ceased, with a shudder, he literally came to himself, his present personality returned, and to our question, "Where are you?" he promptly replied, "At the doctor's." Thus as in other psychosomatic cases, an investigation reveals the presence of a pathological focus of a purely psychic origin in an abnormal impulse of self-preservation, and morbid state of the fear instinct.

The following cases are of interest on account of the recurrent fear which they present.

Mrs. J. A., age thirty-eight. Married. Parents of nervous temperament. Sister is well. Patient is of Irish descent, born in United States. She had a common school education, and is not very intelligent.

A physical examination shows the patient to be poorly nourished; she experiences peculiar noises in the right ear, and when she falls asleep she occasionally

hears voices. As far as she can remember this persisted since her childhood. Pupils react well to light and accommodation; patellar reflexes are greatly exaggerated. She sees spots before her eyes and has vivid visual dreams. Menstruation normal, regular, and not painful. Sensibility to touch, pressure, pain, and temperature is in good condition. She has no headaches, no tremors, no motor disturbances.

Patient complains of a painful and very distressing panophobia.

The patient was put in the hypnoidal state. It took some time to quiet her, she felt intense anxiety. At last she became soothed, and sank into a deep hypnoidal state; but, as it is characteristic of this state, it is varying in its depth from moment to moment and is unstable. The instability was specially characteristic of this patient, on account of the nature of the case. Still, even under such unfavorable conditions, the hypnoidal state yielded some definite and interesting results, revealing subconscious systems of experiences which gave an insight into the nature of the symptoms.

The patient has been a sensitive and nervous child. She liked to listen with trepidation and shivers to all kinds of stories about spirits, hobgoblins, and ghosts, and used to be in mortal fear of evil influences. Darkness threw her into great fear, because she suspected the presence of all kinds of mysterious beings and spirits, especially evil ones. She used to hear strange noises in her ears, and was afraid of them, and ascribed them to the action of evil agencies. All the dark nooks and corners, cellar, loft, and every lonely room and place were peopled by her with ghostly shapes and ghastly figures,—with demons, devils, sprites, and gnomes. In her sleep she did not fare any better, since she suffered from frightful dreams and nightmares. The patient thus passed her childhood in continuous

fear of unknown and mysterious powers, surrounding her on all sides. The child lived in constant terror of things she could not give an account of; she was afraid and did not know of what. It was really a cultivated form of panophobia developed in a sensitive child. Later on the fears apparently lapsed, but really did not disappear,—the fears became subconscious. It was those dissociated, subconscious fears of something indefinite and intangible of early childhood that were manifested in the stress and worries of fully developed womanhood as an inexpressible, unaccountable fear of some impending evil; in short, as panophobia.

Mrs. A. is twenty-two years old; Russian; married. She suffers periodically from attacks of violent headaches, lasting several days. Family history is good, parents are alive, and never suffered from any physical or mental diseases. Mrs. A. is easily frightened, and has suffered from headaches and pressure on head for quite a long time, but the pain became exacerbated some five years ago, The attack is sudden, without any premonitory feelings, and lasts from eight hours to two days. The headache often sets in at night, when she is asleep, and she wakes up with frightful pain. At the time of the first attack she was very much run down. Otherwise the patient is in good condition, but complains that her memory is getting bad. Patellar reflex is exaggerated. Field of vision is normal. The eyes show slight strabismus and astigmatism, corrected by glasses, which did not in the least diminish the intensity as well as the frequency of the headaches.

Mrs. A. suffers from bad dreams and distressing nightmares, the content of which she cannot recall in her waking state. She also often has hallucinations, visions of two women wrapped in white, pointing their fingers at her and running after her. She never had any fall, nor any special worry or anxiety, never suffered

from any infectious diseases. After a persistent inquiry, however, she gave an account of an accident she met with when a child of eight. Opposite her house there lived an insane woman of whom she was mortally afraid. Once when the parents happened to be away, the insane woman entered the house and caught the child in her arms and greatly frightened her. Another time she was sent out by her parents to buy something in a grocery store. It was night and very dark. She bought the things and on the way back she saw two women in white with hands stretched out running after her. She screamed from great fright and ran home.

Mrs. A. is very much afraid to remain alone, and especially in the dark. She is not so much afraid in the street as in the house. The two women appear to her now and then, and she is mortally afraid of them.

The patient was put into hypnotic state. There was marked catalepsy; the eyes were firmly closed, and she could not open them when challenged. Suggestion of general well-being was given and she was awakened. On awakening, she could not remember what had taken place in the hypnotic state.

Next day she was again put into hypnosis and went into a deeper state than the day before. She was asked whether she thought of the crazy woman occasionally, she replied in the negative. The patient spoke in a low, suppressed voice, the words coming out slowly, as if with effort and with fear. It was then insisted that she should tell one of her recent dreams. After some pause, she said: "Last night I had a bad dream; I dreamed that I stood near a window and a cat came up to the same window. I saw it was crazy. I ran away and the cat ran after me and bit me and scratched me. Then I knew that I was crazy. My friends said that there was no help for me. I dropped

the baby, ran, and jumped down stairs. I remember now that when I fell asleep I saw a woman, maybe the crazy woman. I covered myself; I knew I was only afraid, and that she was not real. Six weeks ago I saw the same woman, when falling asleep or when asleep. I ran away and she ran after me and wanted to catch me." Mrs. A. in relating these dreams, shivered all over and was afraid, as if actually living the dream-experience over again. "It was this woman who caught me in her arms and kissed me, and embraced me and did not let me go, until my screams brought friends and my father, and they took me away from her by force."

Gradually some more dreams emerged. "I dreamed some time ago that the woman came to me and spilled hot water on me. Another time I dreamed that I was in the insane asylum; she came out, told me she was well; I was greatly frightened and ran away." Mrs. A. then became quiet. After awhile she began to relate a series of dreams. Sometime ago she dreamed that the woman entered the room where her father was and ran up to him, evidently with the intention of hurting him. Her father ran away, and she hid herself in a closet in the next room. "I also dreamed that the woman was shadowing me in an alley. She wanted to get hold of me, while I was trying to get away from her. I turned round, and she gave me such a fierce look. It was so fierce. I ran and she could not catch me. I should die, if she catches me." Mrs. A. shivered, "Are you afraid of her?" "Not now, she is not here. I did not dream of the woman much before, but sometime before my marriage I began to dream of her quite often. In one of my dreams about her I saw people putting cold water on her, and I could hear her scream. It was awful! I dreamed I went upstairs, opened the door and met her face to face. I was badly frightened,

but could not run away, so I jumped out of the window. If I could only not dream about her."

This is an extract from a letter sent to me by the patient's husband: " . . . She had another attack, it did not last long, and it was not severe. She dreamt several times this week. I shall try to relate them as accurately as possible. She dreamt that I left the room for a while. Our baby was sleeping in the next room. All of a sudden she heard baby cry out: 'Mamma I am afraid!' She told the baby to come to her as she herself was afraid to leave the bed. Baby came to her. The child looked frightened, her face pale with fear, exclaiming 'Mamma, a devil!' As the child cried out, my wife heard a noise in the room, something moved close by. She became very much frightened. It seemed to her that something terrible and unknown was after her. She wanted to scream for help, but could not. A hand was stretched out after her to catch her. She woke up in great terror. Another time she dreamt that she was in a hall way, she saw a woman and became frightened. It was the same crazy woman. My wife is exceedingly nervous and in fear that something awful is going to happen to her or to the family. . . ."

A rich, subconscious dream-life of agonizing fears was thus revealed, a life of fears of which the patient was unaware in her waking state. The dreams referred to the same central nucleus, the shock and fears of her early childhood. Worries about self and family kept up and intensified the present fear states. The symptom complex, as in all other psychopathic cases, took its origin in the impulse of self-preservation with its accompanying fundamental fear instinct.

C. Age sixty-one. Italian. Family history is good. Has two children. Patient's trouble dates back forty years. It is intermittent in character, appearing every

year or every two years and lasting for a period of two weeks. The length of the attacks has gradually increased. The attack he is suffering from at present (1903, July 17) lasted for about a year and a half, and incapacitated him from carrying on his occupation as hair-dresser.

When the patient came to this country, he worked in a barber shop. He strongly objected to the occupation and had an intense dislike to the place he worked in so that even now he describes it with a shiver and speaks of it in terms of disgust as "dark, gloomy, and horrid." Patient used to suffer then from attacks of depression which would last for several weeks. He conceived a hatred, a sort of terror of the razor which was constantly before his eyes. He could not assure himself that the razor was in proper condition, or that it was really well cleaned, and he would keep on wiping it incessantly. From this "barber period" date all sorts of insistent ideas; all kinds of forms of uncontrollable impulses gradually began to take possession of the patient's mind. The patient specially suffered from those recurrent mental states during the attacks of depression. We can give here but a few examples of them as their number and full description would require, as a the patient put it, "big volumes."

In one of his attacks he conceived an intense dread of "hands in his pocket." By accident his wife chanced to put a handkerchief into the patient's overcoat pocket; the patient was forced to give the new overcoat away and have a special overcoat made "without pockets." Once he took a walk with his children and a stone on the way "troubled" him. "It was not in the right place. I cheated my children as I did not want them to suspect my trouble. I sent them ahead on some pretext and remained behind, removed the stone, and then was satisfied." On another occasion a

carpenter fixed the steps in his shop. Patient noticed two nails which made him feel uneasy, and finally tantalized him. He called the carpenter again and on the pretext that there were some dead rats, he had him remove the nails and the plank. He did not permit the planks with the nails to be replaced. On another occasion a hole under the sink was plugged up with paper and then cemented. The patient became restless and full of anxiety until he opened the hole again and with great difficulty took the obnoxious paper out. When the house was repaired the plumber would plug up the hole in a similar fashion and he watched him the whole day, standing close to the plumber, fearing the plumber might plug up the hole with paper. During this watch the patient was in a state of fear, and when the work was over he was exhausted from his anxious vigil.

Two years ago patient was more or less free from these insistent ideas and impulses, but the landlord took it in his head to make some alterations in the house, and since that time patient became worse, the ideas and impulses torture him constantly. "Oh my God, that landlord made those changes!" When the ideas and impulses are not carried out the patient becomes restless, feeling of anxiety grows into intolerable fear. A terror of some unknown evil possesses him. There is an increased pressure on the head and he is in agony until the impulse is carried out, then with a sigh of relief he says: "Now I am satisfied. Have you ever seen anything like it?"

The patient has a general unaccountable fear, panophobia, gets easily frightened—he is fear obsessed—nails, strings, bits of paper, pins, stones on the road and other things perturb his mind greatly, and must be removed before he can be at rest.

The patient must do things over and over again before

he can assure himself that the things are all right. *Folie du doute* is quite pronounced in him. He must rise from bed some fifteen times and more to assure himself that the door is locked, or that the gas is turned down. The emotion of fear with the feeling of insecurity and anxiety seems to be always present and associated with his active life. He is never sure that things, however trivial, are done the right way.

The patient has a special dread of giving his address or giving his name, and he is terrorized when he is asked to write his name. When he is forced to give it, on account of business, or to his friends, he suffers agony the whole day. While taking the history, the patient was asked his name. He started as one shot. "Oh, my God! Do not ask me!" He took out an envelope from his pocket, and told me to copy his name. He watched closely, looking the paper over and over again to assure himself that the name was correctly copied. When asked for his address he was scared, ran out into the hall; the wife had to give the address.

The patient is easily thrown into a state of fear and terror; he is restless; he would every time rise from his chair and exclaim: "Oh, my God! Think what I have to suffer!" He says he cannot describe all his experiences. He wishes that some one who is a good writer should have his experience for at least thirty days, and then describe it all. The patient had no cuff-buttons on, he was afraid he would lose them; he did not want to go to the box in which the buttons were, and he could not let anyone else take them.

The patient does not complain of any other trouble; appetite is good, though his sleep is disturbed; has lost somewhat in weight recently. He is a tall, well developed man, he is somewhat pale and has a careworn expression on the face; his mind is clear. He

fully realizes the absurdity of his insistent ideas and impulses and laughs at them, calls them "foolish, ridiculous." Physical examination is negative. Knee jerks exaggerated. No clonus. Pupils react to light and accommodation. Field of vision normal.

While patient was being examined he happened to catch sight of a piece of string on the gas-jet, he started, became agitated and exclaimed: "Oh, my God! There is a string! I won't look at it," and he turned his head away, but it was of no avail. The string seemed to have had an irresistible attraction, he looked at it and watched it from the corner of his eye. Finally, he could not stand it and began to beg for permission to cut the string. When the string was cut he felt relieved. "It is all right now," he said, and added, "isn't it foolish?"

Patient asked me if there was any danger of his wife catching his disease; he was assured that there was no danger, and he felt satisfied. A few minutes later he wanted to be reassured that there was no danger.

Patient saw me write his name, he examined the writing minutely to make sure that every thing was all right. He did not feel satisfied however. "Have you made the dot on the 'i'?" "Are you sure? Let me see it again, please. Make the dots over again." The dots had to be emphasized and made quite big so as to satisfy him. "Now it is good, all right." He was asked to write his name; he refused to do it, and finally after long persuasion he agreed to write on his own paper. He was very particular about the dots and as soon as he finished writing, he put the paper immediately into his pocket. When asked to write his name on the paper given to him he positively refused. Said, "I will not be able to go home and will have no rest. I may do it next time."

Patient was then asked to write 24, 42, and make

an addition. He at first hesitated, but finally wrote, though with an air of extreme unwillingness. He first took out a slip of paper from his own pocket and wanted to write on it, but it was insisted that he should write on our paper. The numbers were written down and the addition correctly performed. No sooner was the operation completed then he exclaimed: "No, let me write it over, it is not well." He tore off the paper on which it was written and put it in his pocket. He wrote the numbers again and looked at them hesitatingly. "I think those numbers ought to be a little further apart." He was assured that it was all right, and the paper was taken away from him. His attention was distracted by some electricity which was given to him. Immediately after the treatment he began to plead that the paper on which the numbers were written be returned to him. His fear was intense." Oh, my God, I must have the paper. I will have no rest without it." He grasped my hand and began to kiss it, imploring me for the paper. As soon as the paper was given to him he eagerly grasped it. His expression was that of intense delight. "I am very much pleased with you," he said,"I like you."

Patient was questioned about his dreams. Said that about fifteen years ago used to have many bad dreams, but he could not remember any of them. Was asked, if he ever had any dreams about nails or strings. Patient grew restless and uneasy at this question. He said that he did, but could not remember them. While patient was talking he saw a pin in a chink of the floor. He grew uneasy, took out a knife, and with some efforts succeeded in getting at the object which turned out to be a piece of wood. The patient realized fully the absurdity of his action. "Is it not foolish?" he said. "I call that ridiculous." Patient says that if he were rich

would have a house built in which no nails could be seen, or better still, without any nails.

Patient was put in hypnosis. After a few minutes of fixation, his eyes closed. Condition was that of complete relaxation. Eyes were firmly closed. When challenged to open them he could not do so. Catalepsy was readily induced. While in hypnosis he was questioned about his dreams. The result was striking. While in his waking state he could not recall a single dream, in the hypnotic condition the dreams came to the surface with great ease. He related one dream after another. Dreams of fifteen or twenty years ago came up apparently without any effort The dreams were about people who wanted to kill him with revolvers or clubs. At other times again he dreamt that he was falling from high places. It was insisted that he should remind himself of any frights or accidents that he ever had. It was found that when fifteen years old while walking through the streets of his native town he saw from a distance a large stone and thought it was a coffin; it was during the time of the cholera, this frightened him greatly. Another fright he had was twenty years ago. He was going on a train to Rockaway. The train ahead of him got wrecked, and he saw many bodies, dead and wounded. This affected him greatly,—the fear psychosis became fixed and predominant in his emotional life.

The psychopathology of the case is a diseased impulse of self-preservation and a morbid state of the fear instinct.

Mrs. C. C., thirty-five years old; married three years. Father is of neurotic, passionate temperament; mother is nervous, seems to suffer from some kind of epileptiform attacks, and periodically from severe hemicrania. Brother and sister are well, though also nervous and excitable.

Patient is quite intelligent, but very emotional,—cries at the least provocation; her attention is easily distracted; mental processes are normal. Desultory memory for numbers and syllables is poor, but logical memory for events past and present is well preserved. There are no perceptual disturbances,—no illusions, no hallucinations. Sleep is light, and is disturbed by dreams.

Physical examination is negative; except for the fact of marked ill-nutrition and flabbiness of muscles, nothing special could be observed. Patellar reflex is exaggerated. Pupillary reaction and accommodation to light and distance are normal. Field of vision is normal. No motor disturbances. She complains of creeping sensations in the extremities, in the hands and legs, also of tingling sensations and numbness in the body and of pains in the back. An examination, however, shows that the patient's sensitivity to all forms of stimulations is normal. At times she suffers much from pains in the back, from paraesthesia, tingling sensations, and numbness of the extremities and from paresis of the whole body. Motor imitation is marked, the patient frequently copies and imitates motor habits that specially impress her. During the course of her life patient has taken up all kinds of motor habits and twitchings, although she succeeds in arresting them. The motor automatisms are not of an insistent character.

What the patient, however, specially complains of is insistent ideas and feelings which torture her, and from which she is unable to free herself. Thus, she has an extreme abhorrence of women. Woman to the patient is impurity, filth; woman to her is the very incarnation of degradation and vice. She would not pass a woman, if she could help it. Patient tells me she would not have come up to my office had a woman been standing

on the steps. She cannot pass a woman without a sense of nauseating disgust. The house-wash must not be given to a laundry where women work.

The patient's husband corroborated the general symptoms and gave additional data. They had to break up house and remove to another one, because carriages opposite their window happened to be hitched in knots and in angles which the patient could not tolerate. Pencils, sticks, books and other objects must be put parallel to the wall and not so as to form an angle or be brought in relation with any of the angles of the room. In kissing her, the husband must be careful that the kisses should not be in a vertical position, nor form any angles, but all must be arranged in rows, parallel to the wall. When dining in a restaurant, should a gentleman and a lady happen to come near them, the table must be immediately left in the very middle of the meal.

Patient has certain formulæ and phrases which she seems to regard with superstitious awe, although she is conscious of their absurdity. She insists that the husband should repeat verbatim the phrases, and if he happens to substitute another word, or phrases the terms differently, she is much disturbed; he has to help himself out with a dictionary, she is not supposed to tell him the words. When she attempts to counteract her insistent ideas and impulses, she has crises of crying and of intense depression and suffers agony.*

Patient feels unhappy and is distressed over the misery she is in, and of the pain she causes her husband. She bewails her lot, regards herself as insane, but the ideas and impulses are irresistible and uncontrollable. Mr. C. tells me that his wife experiences horror and disgust at the touch, at the

*All these are evil omens, tests and charms, formed by the patient on the principle of metathesis, contrast, and others.

mere sight of a woman. He must be on the look out not to be in one line with a woman, even if the woman be two or three blocks away. Nothing must be picked up on the street, not even the most valuable object, perchance it might have been dropped by a woman. A woman once happened to visit his wife, who could not help herself and had to admit her female guest. The visitor was sent off by some excuse or other. Unfortunately, the woman before leaving stopped on the threshold of the house for a few moments. The house was at once washed, cleaned, scrubbed, and purified as after a pest. The husband was not permitted to enter that door for a week, until the threshold was ripped up, another new one made, and the position of the door changed. Patient has unaccountable fears; she does not know what it is she is afraid of; she is only conscious that, when she remains alone, especially in the evening, a fear suddenly seizes her.

The hypnoidal state brought out the fact that the patient, who was educated in a convent, was easily frightened and was specially afraid of the dead and of the devil. While in convent she used to have frightful dreams in which the devil played the chief part. Thus once she dreamed that the devil pinched her ear; she cried out and woke up in great fear. The nun upbraided her, because the devil could not possibly visit such a holy institution as a convent. Once the devil threw her out of bed and threw the mattress after her. The people in the convent became frightened, and the girls screamed and prayed. The priest was called for, and he asked the patient whether she had been praying for the lost souls in purgatory. On being answered in the affirmative the priest advised her not to pray any longer, because the souls from purgatory troubled her. She stopped praying for the lost souls

and the trouble completely disappeared. It is the fear of evil agencies that keeps on persisting in the subconscious life of our patient and is now and then giving rise to indefinite fears of the unknown, panophobia. The foundation of this panophobia was laid in the patient's tender childhood, and, although she no longer believed in evil, impure agencies, in fact even ridiculed them, still the fear did not fully lapse,—it became dissociated and subconscious.

The patient's motor automatisms and imitativeness can be readily traced to her childhood. As a young child patient was very impressible, highly suggestible, more so than any other child of her age —she suffered then from habit-tics and from choreic-like movements and twitchings. The suggestibility of the patient's waking state is now greatly reduced, but the subconscious suggestibility is as strong as ever. She can, however, easily free herself from such subconscious motor suggestions and imitations, so that they do not trouble her much. They are but transient and soon tend to disappear.

Some twelve years ago the patient had a bad fall and hurt her spine. It is to that fall that the subjective paraesthesia in the extremities, the tingling sensations—numbness, paresis and pains in the back can be traced,—the patient passes at each attack through the original experiences of the accident of the fall.

When about the age of eighteen the patient suffered a great shock,—one of her near relatives attempted to assault her at night. This accident threw her into a series of attacks which she characterized as "hysterical attacks." She really never got fully over it, and the incident, though apparently but faintly present in her conscious memory, has remained active in her subconscious life.

The patient's gynophobia or hatred of women may

be traced to her training received in the convent. While there she was impressed with the belief that woman is a vessel of vice and impurity. This seemed to have been impressed on her by one of the nuns who was holy and practiced self-mortification. With the onset of her periods, and with the observation of the same in the other girls, this doctrine of female impurity was all the stronger impressed on her sensitive mind. This, however, lapsed from her conscious memory and did not come to the foreground of consciousness until later in life when she was fatigued and exhausted by the strain of office work, toiling many days at a stretch. Still this dissociated, subconsciously buried prejudice of youth might have never come to the surface had not another factor favored its forthcoming and resurrected an experience that had apparently long gone from her active life. Three years ago the patient married a man somewhat younger than herself. Being of a highly sensitive mind and of a suspicious disposition, she developed an intense feeling of jealousy in regard to her husband. It was under these conditions of jealousy that the long-buried and dissociated belief in the impurity of woman came to life again.

Instead of applying it to herself, the feeling of gynophobia was applied to others. This is due to the jealousy which called forth that subconscious atavistic belief of the patient's religious youth. The magic formulæ and superstitions full of fear belong to the same subconscious stratum.

Patient is a woman of forty-four, married at the age of twenty-four; nineteen years ago had salpingitis and pelvic cellulitis, for which she had all forms of treatments and operations. All these treatments did not alter her condition. She finally fell into the hands of a gynecologist who, after treating her by all kinds of gynecological methods, became tired of her, and referred

her to a neurologist who tried his neurological powers and gave her up in his turn. By this time the patient was frantic with the fixed idea of operations. She was in terror of her trouble, and she raged at her invalidism. The patient became obsessed with faith in surgical operations as a cure of her terrible state from which she must be delivered at any cost. One operation after another was performed on her for the relief of her "fearful suffering." She had an operation of ventral suspension, another operation for pelvic adhesions, another for rectal stricture, and a number of other ones just in order to humor her.

Under osteopathic treatment she developed the fixed idea that she had a Lane's kink. Recent skiagrams, of which I received a great number, developed in her the fear of some trouble in her "sigmoid flexure." This "sigmoid flexure" keeps on moving up and down in the body, keeps on pounding until it makes her feel nauseated, sick, in constant agony of headache, full of pains in the left side, unable to walk, even to make a step, unable to see or to read, unable to do any work, on account of the constant agonies; incapable of eating, incapable of thinking, and generally being in a state of "living death."

The patient was in terror of her "sigmoid flexure" which actually incapacitated her from doing anything. She was, to all intents and purposes, paralyzed by the fear of "sigmoid flexure" of which she kept on thinking day and night, and of which she was in a panic, lest it became paralyzed, "relaxed, dead," and then begin to pound. The pounding and the paralysis of the sigmoid flexure were to her the Scylla and Charybdis between which she had to steer in order to avoid "the horrors of her sufferings."

For some time she was in fear of taking any food, because this excited the sigmoid flexure to activity and

pounding with consequent paralysis of the lower intestinal tract. In such a state she was frantic with fear. She ran around and asked for the thumping to begin; sometimes when the thumping was too much for her, she asked to be taken out in an automobile, in order to paralyze and "deaden" the overactive sigmoid flexure. She fell back on liquid food and that only in spare quantities, took to her bed, did not want to see anybody, did not walk on account of her "extreme feebleness," could not do anything, and became emaciated and an invalid for years.

The fear of indigestion and the sigmoid horror poisoned her life and extended to all her activities finally reducing her to a living skeleton, to "a machine, to an automaton." She was afraid to walk a few yards for fear of the sigmoid flexure. The "sigmoid flexure system" extended and finally invaded the whole of her life; she became nothing but a sigmoid flexure.

The patient had intervals when the condition somewhat improved or rather when it was not so intense. About every two weeks, at rather irregular periods, she had attacks or "spells," when the fear of the sigmoid flexure and "the deadening of her life" reached a climax, and she was in a state of panic. In her effort to escape from the "terror and horror" of the sigmoid flexure, the patient was ready to do anything. She behaved like a hunted animal frantic with fear.

The patient's whole mind was set on herself, on getting well, on her health. One could clearly study in her the underlying factors of the impulse of self-preservation with its fear instinct as well as the factor of the low fund of neuron energy by the constant complaints of exhaustion and fatigue at the least effort, mental or physical. Anything that in any way disturbed her brought about all the symptoms of the disease, the headache, the nausea, the constipation, the eye-ache,

and above all the thumping and pounding of the "sigmoid flexure" with the consequent paralysis of the lower tract and the evil effect of "deadness," accompanied by a state of intense terror, almost uncontrollable, wild fear.

Everything was sacrificed on the altar of that merciless, psychopathic Moloch, the self-impulse and fear.

The following account is given by the patient:

"My earliest recollection of any illness was a good deal of sore throat, not excessively severe, not enough to keep me much from school. When about seven I had a long, severe attack of typhoid fever accompanied by erysipelas from my knees down. It was only on account of the greatest care that I survived.

"During my childhood I acquired most of the children's diseases: scarlet fever, measles, chicken pox, etc. I usually spent a good portion of the winter months indoors with childish trouble. There was one thing that never failed to accompany my illnesses. That was aching ankles. It exceeded any other suffering I had. I was troubled with them for two years; Mr. F. says even after we were married.

"When I was between ten and eleven years I contracted a fever which was called malaria, only I think it must have been something more serious. It began with a severe chill and after that I was ill in bed for a long time. When I was better my mother and I went abroad, and in eight months I gained about twenty-five pounds, weighing, at the age of twelve, ninety pounds.

"After my return from Europe I steadily increased in weight and would say that during my girlhood days I weighed from one hundred and fifteen to one hundred and twenty-five pounds.

"I matured at thirteen years, six months, and was always normal. During my periods I lived my every-

day life, going to school, dancing, and doing anything that I did at other times.

"At about thirteen years of age my eyes were tested and glasses prescribed for distant use. I was both near-sighted and astigmatic. While I could see clearly for near work I always seemed to be under a nervous strain. To apply myself closely to study and to concentrate my mind and eyesight in any work always left me nervous, and I skimmed over the surface of everything I did, never going deeply into anything, not memorizing much of my recitations which sufficed for the day's work. This strain grew more marked as I grew older and always have I labored under it. I went to numerous oculists, but with no satisfactory results.

"At this time I suffered from constipation and sick headaches. A marked characteristic of my headaches has always been a full feeling in the head, pressure against the back of my eyes. I know now that a large part of my discomfort and nervousness was due to my constipation and from the gas in the bowels. My mother was dead, I was not in the habit of discussing my physical troubles, so I kept them to myself and stood them as best I could. I thought it was necessary for some people to suffer from troubles, and that it was my weakness. I do not remember of doing anything for my constipation until I was a young woman.

"My headaches were never relieved by lying down or sleeping, so I kept on with my life under trying conditions many times. I went to school and lived my life as best I could. While I walked an ordinary amount, I was not a good walker and, as I remember, was often conscious of a dragging weight in the rectum.

"As I grew to womanhood I began the use of enemas, laxative waters, and latterly various drugs. These gave me temporary relief only, clearing my head and

helping my nervousness; but the reaction came quickly. I changed from one remedy to another, but was never satisfied that I was getting anything more than temporary relief. It did not take but a small quantity of any medicine to move the bowels. I think the movement was low down in the bowel.

"All this time I was stout, had good color, and was the picture of health. I was married at about twenty-four years of age.

"The year after I was married I weighed almost one hundred and fifty pounds. I was happy, but my intestinal trouble continued. There was much gas in the bowels and pressure in my head. Part of the time I tried to ignore it and part of the time attempted to relieve myself with enemas, etc.

"When I had been married about one and one-half years I had a severe attack of cellulitis. My husband had some catarrhal trouble. At different times he had been treated for it, it was at one of these attacks that I became infected.

"I was very ill and was left with many adhesions. I did not know why I did not recover, but remember there was a feeling of weight and the tissues were not as free as formerly. This added greatly to my nervousness.

"After operation my nerves felt the strain of it all, and I realized I was breaking down. I went to a sanitarium and was given, in addition to the baths, etc., pelvic massage.

"I kept the bowels free and was able to do quite a little walking. My weight was much reduced and when I left I weighed about one hundred and fifteen pounds.

"For a few years I got on a little better. At times I would find a way of taking enemas or some medicine that would relieve me, and then I would feel better and

gain in weight. At one time I weighed about one hundred and thirty-five pounds and remember how relieved I was from the feeling of weight in the lower part of my body.

"About eight years ago I became very much frightened over my nervous condition: The medicine I had been taking for my bowels ceased to be effective; the movements were loose and there was so much tightening of the lower bowels and much gas.

"I came to New York, and almost immediately upon my arrival, it seemed as if something gave way in the lower part of my body. I think it must have been a weakening and lowering of the pelvic floor. I went to a gynecologist whom I had previously consulted, and who at one time had curetted my uterus.

"I was beside myself nervously, and thought the bowel trouble had been aggravated by the uterine condition and, if something could only be done for that, I could get along with the intestinal trouble. I knew nothing of strictures, did not know what they were. I blame myself now that I made light of the intestinal trouble.

"The doctor said he did not see why I was in such a nervous condition, but suggested fastening the uterus to the abdominal wall. This he did, but he also attempted to break up the ovarine adhesions which he found, and he removed the appendix.

"After the operation I had more adhesions than I had ever dreamed of before, but so sure was I of my surgeon's ability that I believed that they would all be absorbed and I would get well. I was full of hope, and, though under a terrible nervous strain, gained in weight.

"If I had gone to some quiet place with my nurse, I might have avoided trouble for a time at least, but I was induced to go back home where I saw too many people, and kept up beyond my strength. It took but a short

time to complete my breakdown. I lost all feeling in the lower part of my body and all sensation was centered around the right side of my body. I have always had more or less of it, due, I think, to the weakness of the nerves and the pressure of the gas in the colon.

"I went to a sanitarium. I did everything to keep up all the time with the pounding going on in my intestines; I was so distressed and frightened that I did not know which way to turn. The uterus finally came down and I had to get off my feet altogether, the congestion in the pelvis was so great.

I was terribly distressed in the lower part of my body. My physician had discovered a great deal of eye strain and had both the horizontal and the vertical muscles cut. Finally he sent me to a gynecologist, and from him I got some relief and a little of my confidence restored. He had me take various positions four times a day at periods of fifteen minutes each, and breathe against a 'shot apron' placed across my abdomen. This stretched the adhesions, strengthened the abdominal wall, and raised the pelvic floor. The movements of the bowels were better formed. Since then I have been operated several times. I am convinced that the sigmoid flexure is at the bottom of all my troubles."

It may be of interest to learn the fact that as a child, up to the age of five, patient lived with her parents who settled as pioneers in a woodland country, infested with poisonous serpents or snakes. One day, about the age of three, she entered the house with a dead, poisonous snake in her hands. The child was covered with blood. The parents were greatly scared. The child herself was not afraid, but the intense fear of the parents was communicated to the child, and this fear was strongly impressed on her. Since then the child was in terror of poisonous serpents, in fact, of all kinds of snakes.

Even now she is in terror of anything that in the least resembles a serpent, a snake, such as worms, or caterpillars.

Soon after, the patient began to have nightmares of serpents attacking her; she kills them, like the infant Hercules; she wakes in a horrible state of panic. These dreams have survived into her adult life and manifest themselves from time to time, though not with such severity of terror. It is quite probable that the fear of the sigmoid flexure is a survival of this fear of her early childhood, manifested under different conditions. In other words, the fear of disease has gradually extended by the principle of metathesis, proliferation, irradiation, and fusion, involving the ancient fear of childhood on which the patient finally settled unconsciously or rather subconsciously, as the *fons et origo* of her malady.

CHAPTER XVI

PSYCHOPATHIC FEARS

I give here a series of quotations from my patients' accounts*:

I

"I cannot quite remember when I commenced to be apprehensive; possibly it was seven or eight years ago. Whenever I would feel tired or nervous, then any little pain I might have or thought I had would be very much magnified in my mind and would only be forgotten after a visit to a doctor who would, as a rule, tell me there was nothing the matter and I would come out entirely well.

"I remember, a little longer than eight years ago, I went to see a doctor whom I had not seen before. He examined me, or at least pretended to, and pronounced it diabetes.

"My regular physician was away at the time and would not return for two months, during this period I lost a great deal of weight, did not sleep, and had to pass urine every half hour or so as I remember. When my own physician returned, I went to see him, and told him the story. He said 'nonsense, there is nothing the matter with you, except nervousness' and advised me to get off my special diet and live a normal life, which I did; and all the previous symptoms disappeared.

"Three or four years ago, I was troubled with more or less sore throat and, in the morning, would find that the saliva would contain some blood. I immediately

* Each patient's account is indicated separately by a Roman numeral.

had tubercular trouble, until I went to a specialist and was told that indigestion caused the throat trouble, and that bleeding gums produced the blood.

"I have had headaches usually directly over the nasal tract in the middle of the forehead. I had heard of one who was similarly affected and had to be operated upon. I went and had an X-ray taken and found nothing, did a little more exercising, and got my headaches over.

"Last spring, just previous to my going away, and at the height of my nervous state, I woke up suddenly one night and found that my stomach was very much distended, was pressing my heart, and that the latter was beating most rapidly. I thought immediately that I had had a shock, but later when the physician called, he said 'no.' The experience of that night however, has always remained with me, and I never go to bed without some fear that I may have a recurrence. I did have a similar attack about three weeks ago, without the vomiting, and it was only after taking some whiskey that I was able to get the wind out of my stomach.

"I have had cancer, appendicitis and maybe one or two other things, the fear of which has at various times been dispelled by physicians.

"I thought once, some years ago, that a burglar was in the house at a time when I was alone. I went and investigated at the time and found none, but for the rest of the summer, during which I lived alone at the house obtaining my meals elsewhere, I always made an effort to arrive home before dark, to get the lights lit and never went to bed during that period without more or less of a 'creepy feeling.'

"This last summer in July I started to play tennis one day and found that my heart immediately commenced to palpitate, but saved myself as well as I could.

"After the match, I laid down, and my heart did not return to normal for a couple of hours. As I had always played much tennis in the previous summers, this worried me a great deal. Later in the summer I found that in playing golf, my heart action would increase a great deal in the course of the game. I had never given particular attention to the heart before. This worried me. I tried dancing one night, and I thought my heart never would get down, and had to go out on the piazza to calm it and myself.

"The result was that when I returned to the office in September, I felt tired, nervous, and discouraged."

II

"When a child I always had an intense fear of burglars. I used to dream about them night after night for several years. I also had a fear that my life was in danger all the time. I was always suspicious of persons, because I believed that at any moment they might kill me—in fact I am always suspicious of people to-day, although I have no fear about being killed. I am always afraid that I am being imposed upon and that people take advantage of me. I was always bashful from a mere child.

"However, when I got into high school I began to lose that characteristic. I always was unusually afraid of girls until I began to go to dances and parties, and then my bashfulness wore off somewhat. I had appeared before rather large audiences on the stage and that didn't seem to trouble me much. It was always when I came in close contact with people that I felt uneasy. I always felt at a loss as to what to say to strangers.

"Whenever I was with a crowd of boys, I was rather backward. As regard injuries I only remember a

couple. I was hit in the forehead by a base-ball when playing catcher on a team. I was only in grammar school at this particular time; I was knocked down unconscious. Another time I was injured while playing hockey on the ice; I tripped and fell on the back of my head; I was semi-conscious, and remained so for about eighteen hours. Somehow I happened to board a car and went home. I had to change cars to get home and I did all this in an automatic manner. The following morning I awoke with a terrible pain in the back of my head.

"When I was between sixteen and seventeen, I began masturbation, I used to do it anywhere from one to three or four times a week. It was very seldom that I ever masturbated more than once in the same day. I made a final attempt to stop masturbating. I succeeded, and have never done it since.

"I was always more or less sensitive about my looks, because I knew I was unusually homely. My reason for being sensitive was because my relatives on both sides of my family are considered extremely good looking and I was unfortunate enough to be born with such a physiognomy as I possessed. Thus I overheard some one remark about me, it hurt my feelings a good deal. When I went out on the street cars, I was always the center of attraction. I feel that peculiar feeling in my face. My eyes feel as if they were trying to get out of my head. I also feel a peculiar irritation in them. All this takes place only when anyone is around. My face begins to heat up, I am conscious every minute while anyone is around.

"Sometimes I try to throw the feeling off. When I am outdoors the sensation seems more intense. When I go to town I feel that the eyes of all the people are on me.

"While in the public library one day last summer, I

accidentally came across a book which had sexual hygiene. I have forgotten the title of the book and the name of the author as well, however, I believe I could find the book again, if I went to the library. In this book I happened to read about the eyes being affected, if masturbation was indulged in to excess. I have forgotten what it said how the eyes were affected. It also said that after masturbation had stopped, the eyes would be relieved anywhere from six months to two or three years depending on how much the person indulged in masturbation. I believe it said in some cases the eyes were never cured. After reading this and having my peculiar feeling in the eyes I stopped masturbation, because I feared to be afflicted with this disease all my life."

III

"I had the usual fear of the dark common to all children. When put to bed at night and the light taken away, the darkness of the room seemed peopled with dreadful, mysterious shapes, ready to spring out upon me, if I relaxed my watch in the least. So I would keep myself awake, as it were by main force, though my eyes would get so heavy with sleep that it was almost painful to keep them open.

"There were two fears that stood out prominently in my mind for years, even past the time of childhood. One was the fear of mad dogs.

"I have no conscious recollection of ever being greatly frightened by a dog, though my mother says I was once attacked by a dog, and she thought that affected me. At all events I had a perfect terror and great fear that some time I should be bitten by a mad dog and die in that awful agony.

"If there was anything in the papers about mad

dogs, I was sure to see it and remember it. I had nightmares in my younger days, and one of the forms the nightmares took was that of a dream that I was being pursued by a mad dog, and then often being bitten by him. I can recall perfectly well, the overwhelming sense of relief in waking up and finding it was all a dream. As years went on, however, all this fear gradually left me, and there is only an echo left of it in my mind. I don't like to have dogs touch my hands with their mouths or teeth, I always give a wide berth to strange dogs out in the street.

"The other fear, distinct in my mind, was that of blindness. If I would wake up in the night and find the room absolutely dark without a ray of light, I would be horrified and think I was surely gone blind. I used always to take pains and do to this day, to have the curtain or shade drawn in such a way that there was always at least a little chink left for the light to come into the bedroom.

"When I was about eighteen, I studied Greek one summer vacation to make up work I had lost by sickness the previous winter. Shortly after I began to have black specks before my eyes. I went to our family physician after a time, for one didn't think so much about consulting an oculist in those days, and he at once pronounced it 'amaurosis,' or disease of the optic nerve. I stopped my school at once. I was in the high school preparing for college, and after a few months my father sent me over to spend a year with his relatives, hoping the change would strengthen my health and my eyes. But this under-current of fear that I was going blind was with me for several years, though not enough to mar seriously my enjoyment of life. My mother says that my father, who had been over-straining his eyes, thought he was going blind, and she was planning

and turning over in her mind what they could do to save my father's eyesight.

IV

One patient writes:

"*Apropos* of my fear of the darkness which mostly passed away with childhood and youth; at anothor period of my life, when I was past thirty, similar fears reappeared. I had been for some time in a very weak and nervous condition, and was sleeping downstairs alone. Every night those horrible nervous fears would seize me, and though I knew they were foolish, I did not seem able to rid myself of them. It did not seem to be so much a fear of the darkness, *per se*, as a haunting impression that something was climbing in at the windows of the next rooms, and I had to keep awake and on guard, with every nerve tense. To quiet myself, I used to repeat over and over, the 91st Psalm, which I knew by heart, dwelling especially on that verse, 'thou shalt not be afraid for the terror by night." Suddenly and unexpectedly one night, though the condition remained just the same, the burden of fear was entirely lifted, and has never returned.

"I had a great shrinking from death, a fear of it, not because I did not believe in God and a future life, and knew that I was quite safe in my Father's hands, but more because I shrank from going out into something unknown and untried, and especially a sort of feeling that I should lose my personal identity. I was apt to be quite apprehensive when I had little attacks of illness, and fear I was going to die, or ponder over certain symptoms, which I had read were indications of this or that disease, and fear I had it."

V

One of my patients gives the following account: "The nervous trouble (feeling of lassitude, fear of vague evil, fear of shadows fading into darkness, intense depression, loss of appetite and flesh, insomnia, headaches, and visceral disturbances) began in a rudimentary way about a year and a half ago, although I had already been nervous, and was gradually getting more so. At first it would be just what I call 'a painful thought,' that is, if I read something that was a story of misfortune or suffering of any kind, or heard of a real case of similar nature, I could feel how the person must have suffered, felt it as if it were myself. What if that had been me? I shuddered and was afraid. I would go through the most painful of all the sorrowful things I had ever read or known of. It would seem that I was going through the whole experience myself, and then I would hear myself tell the story of suffering, and it was I who had suffered all these experiences. I would begin to believe the story. When the end would come I would go off into a shivering horror that would end in a chill, which would sometimes last for three hours.

"When the horror would come on I would go out and walk until I was tired and come home and go to bed without any dinner and sleep, the sleep of reaction and complete exhaustion. I slept apparently a dreamless sleep, which sometimes lasted about nine hours. Then I seemed to get better in the daytime, but would begin to dream the whole thing at night, and wake up in a blind, shivering terror." The dreams terrorized the patient, who, finally, sank into a deep physical and mental depression. As in many other cases, the patient presents a sensitive organization, subject to a series of shocks dating back to early

childhood. The terrorizing dreams are hallucinations formed by the play of associations out of fragments of *actual experiences gone through during the periods of trauma.*

VI

"During the year 1907," a patient writes, "I took up the study of astronomy and was much engrossed in same, when suddenly an obsession of the mind occurred and which for the time being, and in fact ever since, put a stop to my study of this science. As near as I can recollect I was not in bad health at the time, but was nervous and somewhat worried over business conditions. I had been reading a chapter in Flammarion's Popular Astronomy about the earth's motion and its fall through space, instantly the thought came into my mind that the world was falling. The thought of the fall was so impressed on my mind that try as I could, I failed to throw off the thought. My fear was in the falling. I conceived the idea that the world would bring up somewhere. I could about imagine that I was falling with the world and, when this fear was particularly bad, I worked myself into such a nervous condition that a couple of nights I thought my chance of continued life was most slim. I shook off this condition, and it left me about as quickly as it came. I lost a few pounds in weight during the illness. During the summer of 1911 I had a run of headaches that lasted about six weeks, and which were of almost daily occurrence. At this time the thought of self-destruction was conceived in my mind, making me somewhat nervous, yet was not strong enough to make any great impression. I threw that thought off quickly when the headache subsided. This thought was not in any way active, but merely the thought that I might commit such an act.

"At M., the first two weeks I was much depressed but gained confidence the third and fourth weeks. In the five weeks there, all the time I spent in my room was in sleeping and the few minutes once or twice a day to make a change of clothing. A fear which I could not appear to control kept me out of the room. I awoke late each morning with a most depressed view of things, and I must admit that the vigorous exercise in the gymnasium served to reduce the blue feeling. The sharp knife at my plate at every meal had many terrors for me, but in a few weeks I rather gained confidence, and for a few days the knife had almost lost its horrors to me. One day, becoming very tired after a very long walk, the fear of the knife returned and remained with me.

After about two weeks' stay at this place, I was sent to walk with a man, this being the first time that but two of us walked together. About half way around there suddenly came into my mind the thought that I might hurt my companion and that fear of the walk for me was a strenuous attempt to combat the idea, in which I failed, as that fear hung to me during the rest of my stay. While walking with several people, the fear would be with me just the same, and for a time I suffered greatly, because of this most unreasonable idea. This fear was greatly lessened in the fourth week of my stay, but in the fifth week, a week wherein every effort appeared to be a tiresome one, the fear returned with the same previous vigor. A day or two before I left M. I was sent on a walk with a young man, a walk of some miles and it was a miserable, weary walk for me. The entire walk, my mind held that loathsome fear that I might hurt the young man, and strive as I could I was unable to refute the fear. That one walk had undone the good work that I had accomplished the previous week in

subduing that particular fear. The thought of self-injury was with me during the first three weeks' stay there, and at times I worked myself into a miserable condition, and I longed to take my misery to some one so that a little consolation could be given in return. But knowing full well that consolation or cheer could not be had from anyone, I suffered alone in my misery and that such suffering was of benefit to me is extremely doubtful.

"In my room there was a safety razor, my thoughts often reverted to this, and the act of shaving had many fears for me. I slept but little while at this place. I had horrible dreams during the little sleep I did get, and such dreams did not make my mind the easier to be sure."

VII

"The earliest recollection of my fear that I have goes back to early childhood. I heard from some source that wicked people would be judged after death and irrevocably sentenced to eternal torture in fire, and this idea raised a feeling of the most intense horror in my mind, lest I should not come up to the necessary standard in that dread day of judgment. I used to resolve to be good, particularly on reflection after going to bed, that I would be better so as to escape. However, the fear was vague and only came to me occasionally.

"When I got to be about eleven or twelve years old the fear got to be concrete and more constant. Then I feared that some remark I had previously made about God might have been blasphemy against the Holy Ghost which the Bible says is not pardonable in this or the next world.

"This idea persisted indefinitely, but others came too. I feared I had been instrumental in the death of a playmate, so a possible murderer, and the Bible said no murderer could be saved. There were, besides, many other ideas came in turn, each leading to the fear of hell punishment. For instance I got a great fear of poisons and imagined that my clothes and hands were infected with poison, and I feared I might be damned for not warning people that I was a source of danger to their lives, not having the moral courage to tell them I might be covered with poison. In this connection I feared my discharge might be poisonous and dangerous to others, therefore, dangerous to my soul. At a later time I feared I had not enough faith for salvation from hell.

"By the time I was sixteen years old I had become very much demoralized, afraid of facing my fear, and particularly afraid of being away for any considerable time or distance from my family. In other words, so far as running up against my particular fear was concerned, I had become an abject coward. I have not by any means enumerated all my early fears up to this time, but the first definite one and some of the following leading ones.

"At this time, the age of about sixteen, I became imbued with a new and permanent fear. As I have said I had become a great coward on account of my fear, and I began to wonder what would happen if for some great reason I was called upon to exercise courage and fortitude along the line I was most afraid. I could think of plenty of things that I was so much afraid to do that it took my breath away to consider them even, such for instance as living away from family and friends while under the influence of my fear and still more impossible things. Then the thought occurred to me, suppose it became supremely neces-

sary for me to make such a sacrifice, and the particular form it took was, suppose it was necessary to save somebody else from hell, from an eternity of suffering against merely a temporary bit of pain on my part. Then I went all to pieces with fear and it seemed to me that in the very nature of the case justice must doom me for even having the slightest doubt about such a thing."

VIII

"As a child, I was much afraid of the dark, not a rational fear, *e.g.* of burglars, but when alone in a dark room, I had a fear of some mysterious sort, as though something might pounce upon me. Even now, if I am all alone in a house after nightfall, I feel it to some extent. I remember in my early days waking up at night when I was in bed alone, the terror growing steadily upon me.

"During all my later life, the fears that trouble me most aside from the fears of blushing already spoken of to you, are fears of inefficiency, of not coming up to the necessary standard (painful self-disparagement). While I was first in rank in my class in my seminary course and received marked recognition at Harvard, where I studied also in graduate work, yet the unsocial self-absorption of my life left me so out of touch with the world and society that each point of contact impressed me anew with a fear of maladjustment and unfitness.

"While during the present years I have become much more familiar with people and life, and especially the last year and a half have gained new courage in meeting life, yet the fear of falling below the established standard of efficiency, is a thing I have constantly to fight against. Again and again

have dreamed of forgetting to come to school in time or forgetting about a whole series of classes I was to meet. In waking life there is a fear that I will not meet people socially in an acceptable way, fear of blushing, fear I will fail to recognize people I ought to know. (I am distinctly deficient in this matter). If I read a school or college catalogue, it seems as though the standard of the courses set, condemned me. If I read a book on pedagogy, I feel myself condemned as a poor teacher, etc. Against this at the present time, is the growing confidence that I am moving forward to steady mastery of life, yet fears of that character make a background that gives a tone of burden and strenuousness and struggle to all my work, making the free, joyous, frictionless working a difficult thing for me to attain.

"In periods of depression (not so much the last year) it seems to me sometimes that there was nothing in the world I could do to make a living except teaching, and that I was so unfit to teach, it was a question whether I ought not to resign.

"I talked once to a principal of our school about the trouble I had had about flushing, and said I felt doubtful whether I ought to keep my position, but he did not take the same view of it. My view of things would be sharply different in certain periods of depression and weakness."

IX

"I have always felt faint whenever I have had any kind of examination, for insurance, gymnasium, or by my own doctors. I never could listen to stories of operations without being obliged to get up and leave the room.

"The sight of blood from a cut finger is apt to make me feel faint.

"I had my tonsils taken out several years ago. On my way home I could feel that there was a slight bleeding going on in the back of my throat, I became panicky, had to stand by the door of the car where there was more air, and would have given a great deal to be at home.

"Occasionally, on the street I have felt as though the blood was leaving my head, and that I might faint, and my inclination has been to lean against a building for a few moments until the feeling would be past. In all these panicky times my heart would beat more rapidly, and perspiration would come out on my body.

"When playing bridge, during an important turn of the game my heart would commence to beat fast, I would get short of breath, and I would be obliged to get up and walk around some, or frequently I would take some sodium bicarbonate which would seem to help me collect myself.

"These attacks at bridge have only been noticeable during the last five or six months and did not always occur when I was playing.

"I have always figured that my nervousness had brought on indigestion, then would follow the increased heart beat and the resulting panicky feeling which was akin to fainting in my mind.

"The only incident I can remember that might have a bearing on my being afraid in the dark was when I was in the West at sixteen or seventeen years of age. I lived alone in a home in the suburbs for a time, obtaining my meals at the hotel in town. I used to dread going to that home every night, but I had to, and did. It was during this time that a burglary occurred. I really do not remember being afraid of the dark before this period.

"There is another weakness which has troubled me and that is that I am very apt to exaggerate, and not tell the exact truth even when no consequence could

possibly follow the telling of the exact facts. This has troubled me very much.

"Then there are some words that I cannot pronounce distinctly except with extreme care, and I have felt for some time that it indicated a gradual breaking up of my mental powers.

"About a year ago an associate of mine in business had a complete nervous and physical breakdown. I had considerable to do for him at the time, and finally took him with his nurse out to a sanitarium in Framingham. His condition, action, and appearance during that ride are always recurring, and the fear that some day I may be in similar shape occasionally comes to me. He has since recovered as far as his mentality is concerned, although his physical condition is not good.

"I frequently think out possible accidents to the children. If my boys ride to school on their bicycles in the morning, I worry, thinking that an automobile may run over them. If a child slides down a balustrade, I worry for fear he may do it some day and fall off and hurt himself. When my children have been sick, I have worried and have always wanted to send for the physician on the slightest pretense.

"When our last child was born, my wife toward the end showed evidence of kidney trouble. The doctor would not let her know, but told me. I did not feel that he was giving the case proper attention and insisted on a specialist being called in. The latter arrived as my wife was going into a first convulsion. The baby was of course taken right away, but my wife had a very narrow escape. This experience was almost a nightmare for months after.

"I could not seem to take a logical point of view. Instead of being thankful that my wife and baby had been saved, the predominating thought was

rather, what if the specialist had not come, what if anything had happened to my wife, what would or could I have done for the other children in case the worst had happened.

"Even now when I think of my wife and children, instead of the thought of them making me brace up and determine to get strong for their sake, my inclination is to weaken, get blue and down in the dumps.

"I had a considerable shock about nine months ago. Lightning struck a house where my wife and I were staying, and from the shingles and plaster which I saw coming down I felt that the room we occupied was most struck.

"I commenced to have palpitation, felt weak as a rag, and only with difficulty could I get upstairs. I found my wife had stopped on the way in the corridor to speak to some one and was not near her room, which we found was the one struck.

"The memory of that incident constantly came back to me. Again, instead of the thread of thought running along thankful-it-is-over-and-no-one-hurt lines, I kept thinking of the consequences had the facts been different."

X

"The first fright I remember was at the age of three, when one of my brothers accidentally discharged a gun wounding a woman in the room where I was, since which time I have always experienced a great terror at the sight of a gun or pistol, even in a moving picture show. Also until recently the sight of blood has greatly terrified me, always causing a feeling of faintness.

"Not long after, lightning entered the room where I was, breaking a window and giving us a shock.

"At the age of four and a half my mother's sister,

who lived near us, died after a short, severe illness. I overheard the news of it, and, as I recall the full significance of it, it seemed to impress me and I cried for several hours until my parents returned with the little girl cousin who always afterward lived with us.

"A little before I was nine we moved to the village of Adrian. I had began to stutter at this time and for the first time was teased about it by two or three of my playmates; this distressed me very much, though I never spoke of it to teacher or the family. It was rather a trying ordeal, to have names shouted after me even on the street, by children three or four years older than myself.

"About the age of twelve, while out with a picnic party, we attempted to cross a long railroad bridge, and the train surprised us while crossing. Fortunately no one was injured, though several of us had to jump a considerable distance. I did not jump until the train almost reached me, when I fell, left my basket on the track, and barely escaped injury. I remember being too unnerved to walk for some time, and that a couple of hours later someone remarked that I was still trembling.

"Perhaps a year or two later, or possible the winter following, while we were playing with our sleds at school, one of the big boys seized mine and ran with it across a deep narrow ditch, throwing me off so violently that for some little time, perhaps ten minutes, I was unable to move and they carried me into the school room. From this time on for several years I had considerable trouble with my back. It grew tired easily and would pain."

XI

"As you are desirous of knowing more about my life and environment, I will state concerning them, as follows:

"You will remember that I told you that my step-father was a liquor dealer. Throughout all the time that he was in business we either lived over the bar-room or else lived right in the place where the liquor was sold. My step-father was a heavy drinker, a man of violent nature, and decidedly pugnacious. As a child I have been scared to death by drunken brawls, and many nights have I been dragged out of bed by my mother who would flee with me to the house of a neighbor for safety.

"I might say that until I was seventeen years old, I lived in continual terror of something going to happen. If he was arrested by the police, as often happened, our home would be the scene of turmoil until the case was settled.

"I remember one incident very plainly, when he came home one night completely covered with blood as the result of being held up by thugs, and another time when he left the house to subdue some quarreling drunks with a pistol and returned after an exchange of shots with his hand shot through.

"As a child, I was inclined to study, and associated very little with other children. My mother tells me that I talked early, but when about three years old I began to stammer. This trouble bothered me a great deal and I used to worry about it all the time, especially in school when I would try to recite. I might add that even now, when excited, I am troubled in the same way.

"My step-father has been subject to nightmares nearly all his life; when asleep he would cry and moan and would be unable to move until someone would shake him out of it. He was terribly afraid of them, and I remember he used to say that he expected to die in one of them. I used to be left alone with him quite frequently, and I stood in constant fear of his dying;

and if he fell asleep (as he frequently did in the daytime) I would either wake him or watch his respiration to see if he was alive. At other times, I have been awakened in the night by his cries and would assist my mother in bringing him to consciousness. It was during one of these times that I became aware of my heart palpitating, and whenever he had such a spell, I would be in a state of fear and excitement for some time after. He would have these nightmares nearly every night and sometimes four or five times in one night; and I might add that he has them even now.

"I began to have attacks of dizziness in the streets, and finally one day, I had one, and all symptoms and fears of the attack in school came on, and from that time on I have watched my respiration and suffered from dizziness, and mental depression and sadness.

"You have asked me to tell you more in detail about the attacks or nightmares to which my step-father was subject and which always frightened me greatly, especially when a child.

"My step-father had the habit of falling asleep quite often, even in the daytime, and I have never known him to go to sleep without having an attack in some form. If one watched him asleep, as I often did, one could tell by his respiration when an attack was coming. His breathing would become slower and hardly perceptible, and finally he would begin to moan, and cry out; then, when shaken vigorously and spoken to, he would awaken in great fear and apparent suffering. If he had an attack, and we did not respond soon enough, he would be very angry and say that we cared not if he should die. We were so afraid of these attacks that we had trained ourselves to be ever on the look-out for his cries, even at night.

"It really seemed as if his life rested in our hands. I might say that sometimes these attacks lasted several

minutes before he could be awakened. He used to say that at such times he always dreamed someone was choking, beating, or otherwise torturing him. He had been told by some physician that he would ultimately die in such an attack.

"These attacks were sufficient to precipitate a small panic in the house. I know not a single hour of day or night, but that I have either been called or awakened by my mother in her efforts to awaken him. With the attack over, I would be trembling all over, and my heart would be beating madly. I can remember these attacks from my earliest childhood and it seems to me that on one occasion, at your office, I was startled just as these attacks used to make me."

While in the hypnoidal state patient exclaimed: "I am afraid. . . All my life I lived under terrible fear". . . . "This is just my disease——fear——."

XII

"I have a fear of going home, and I fear being away; I am not particularly afraid of anything, yet I always have a thought or a fear; whenever I undertake to do anything, there is a queer imagination about it. I think of childhood thoughts; if I see buildings, they look to me like sanitariums, which are very distasteful. There is nothing that seems the same to me, no matter what it is. I seem to have little sense and not much memory when I am doing anything; sounds startle me as if it was something else, and if it were something I see, a coat or any garment, it will sometimes startle me as if it were a person; or, looking at a beautiful piece of art work or picture, I can see nothing but the wrong part and a very distasteful thought with it, which I never had because we were lovers of art, as it was our line of business. I never had these thoughts,

that is, I never noticed them when well. A few months after I was sick my brothers would accuse me of over-indulgence, also my mother, as she never liked her sons' wives.

"I know that ever since I was told of our stenographer I was afraid of hurting a baby; if I would be around my sister's dear little one, I would get nervous and leave the room for fear I would hurt it.

"All my nervousness seems to come from my fears. Even in seeing, hearing, smelling etc., there is nothing I am really afraid of, my fears seem to be imaginary.

"Ever since I can remember I always had a fear, no matter where I went, but I learned to be brave. I often heard my father say that I was afraid to walk until I was four years old, but he said I was always good and pleasant.

"There were seven of us; my mother was hard of hearing, and the children could learn and hear bad things without her knowledge. In school I was very bright, especially in arithmetic and history. I always had the first seat in school.

"After getting through the intermediate school, I learned the granite trade which was very hard work, also tool dressing for stone cutters, which I learned rapidly; but always feared I could not do enough, or it was not well enough.

"The men I served my apprenticeship to were vulgar and drinkers, as such men are as a rule. I was never very stout, rather small, but quick.

"The reason for starting to work so early in life was, because we were poor and my father was dead and I was allowed to do as I pleased on account of mother's condition, being deaf. All the brothers learned the same trade, after which four of us started a little shop, and it grew with our hard work; we aimed to do a high class of work, being practical. We soon estab-

lished a nice respectable business, and then it was necessary for one of us to travel as salesman on the road, so the burden fell to me, which I stuck to for several years, and was thrown in with lots of good and bad company, and got to drinking, as I think now, too much.

"There being four of us, when we did things, we were afraid to tell, for we were afraid of being scolded. I, being of tender heart and easily affected, would never tell anything and it was nothing, as men do every day, drink and have a little fun, but I never did anything wrong. If I went with a girl, my mother would always scold about it and also my brothers. This opposition always broke me down, but I still went with the girl for several years, and finally I married her five years ago, under great protest and fear. I loved her as she was noble and good, but mother could never forgive her sons for marrying and continually fussed about it, which I think kept me unhappy and I would drink.

"Whenever I took the grip, I always thought I was going to die. In a few days I would be all right and would go and hustle, either doing hard work or selling goods.

"Last January, we noticed some one had been using our autos and my brother let the police know, so one night at twelve o'clock, they caught them, four men, and took them to the jail. One of them was a young fellow, a driver of ours, and I felt very sorry for him, lying in jail and feared he would be sent to the penitentiary which I could not bear.

"I had a fear, for just a few evenings before that I and another friend had taken his mother and sister out for a ride, for they had pleaded for an auto ride, all of which I told my wife, as there was nothing wrong.

"I feared she would make up some slander against me, to save her brother, and I was very nervous, but still there ought not have been any worry on my part, there was nothing wrong. I felt sorry for the boy and was afraid of false slander. I would drink to rest my nerves, but did not think so at the time, for I did not know what nerves were.

"On the 20th of February 1914, I took to bed thinking I had a cold or grip and was frightened to death, for I thought I had pneumonia one day, Bright's disease the next, because I thought I drank too much, and the doctor assured me that there was nothing the matter with me, except a little fever, grip or bronchitis, and I imagined I had everything, for I had a terrific pain in my heart which made my arm straighten out. In a few days I got up and was nervous, but I thought it was from drink and I never told the doctor for fear of my parents and wife.

"A few weeks after my nervousness our typewriter gave birth to a child and my brothers asked me if I was responsible, and I told them 'No', but I worried, thinking she may blame it on to me, for I was perfectly innocent, but could not help worrying as I was nervous. A few weeks after my illness I went to B. with my brother, and when the public found it out some one put it in a yellow sheet, saying that I had gone to a sanitarium over the condition of our stenographer. I think all this gave me a set-back, for I could not bear to hear a newsboy, and was afraid of women for a long time. All the old vulgar tales I heard and things I saw hurt me.

"I can't sleep nights unless I take medicine, and when I wake I have so many uncontrollable thoughts. My mind never stops, and now I begin to imagine things are alive and all sorts of illusions trouble me. I always thought I never would get well after fighting so hard

for ten months, with all the best doctors to help me. Even when I work I fear I am doing something else.

"At times I want to get well and be happy again. I went to a doctor and I overheard him tell my mother that my 'sensory nerves were functionally affected.' I always thought I drank too much. I had a bad sickness fifteen years ago of a sexual nature, but was never bothered with it since. I weighed two hundred pounds before I broke down. The doctor says that it was bloat a good deal. I may have been nervous a long time before I knew it, I would drink and probably that brought me to this fearful state."

XIII

"I was bred in fear from my childhood. My training and education were essentially religious, of an authoritative and terrorizing character. I was told all sorts of ghost stories, stories of murders, highway robberies, and other horrible tales by the ignorant and superstitious servants and people with whom I came in contact when a child. Many times when in the dark I fancied spirit folk haunting the place. I sometimes felt like screaming with terror. I often used to hear mysterious voices and sounds which I ascribed to spirits. At night, I would often in my fear cover my head with my blanket, bury my head in the pillow and shiver with fear. I was afraid of darkness, of secluded places, of the cellar, of the loft, of the lonely barn, of the church, of the church yard, and more especially of the cemetery. Had I been left alone in such places I would have fainted from terror. My mind was filled with superstitions of all the horrible accidents that may happen to one under such conditions.

"There was a strong feeling of self in the fear, inas-

much as I was in terror of death, and of illness that may bring about death. I have witnessed in my childhood a great many deaths in the family. The agonies of the dying left a deep impression on me. I was afraid of death, and more still of the mystery of death. This fear is now as strong in me as ever,—it is a morbid fear, giving rise to intense agony and anxiety. The very mention of illness and death is enough to arouse the fear, and if the fear is left uncontrolled, the most excruciating anxiety and agony may be awakened, rising to a veritable frenzy of terror.

"This fear of threatening illness and death, whether in myself or in my family, may rise to such an acute stage as to drive me to drink, so as to counteract the emotion by some form of reaction. Drink, however, does not agree with me. A few teaspoonfuls of brandy or of whiskey are enough to upset my stomach or my intestinal tract, and I may vomit, or I may just feel nauseated for a long time, and vomit, if I take a couple more teaspoonfuls. Sometimes the very smell of brandy is enough to make me feel nauseated. I have formed a fear of alcoholic drinks, even wine is apt to upset me. There is no way of overcoming my agonizing fears. Everything with me turns into fear.

"Even the sexual side of my life is associated with fear. I was afraid to come near women for fear of infection. I used to be in agonies of fear of possible infection for days and weeks together. Marriage did not seem to improve matters. Intense headaches are associated with sexual functions so that I am afraid of ruining my brain, my nerves, my health, and getting paralysis, or sinking into imbecility and dementia, in spite of the assurance of my physicians to the contrary.

"The fear of possible infection, bringing a fearful malady, ending in a miserable death specially haunts me of late. The least cut, the most insignificant

scratch is apt to bring about an attack of fear. Shaking hands with strangers, especially drinking from a dish, touched by a strange person, is enough to set me in a paroxysm of terror. Sometimes it is enough to read in a paper, or to hear of sickness, or of an epidemic, to stir up my morbid fear of sickness and death.

"When I look down from some high place, I feel a sort of sinking in my stomach. I am in agony of fear. The fear becomes sometimes so intense, that I feel dizzied, stagger, feel like throwing myself down, and put an end to the misery of my fear.

"I am afraid to board a car or a train. I am afraid I may fall out and get killed, in fact this has actually happened to me. I was nearly killed in accidents, once in my childhood, and another time in my youth.

"In attempting to induce a state of intoxication I have often felt severe nausea and vomiting. Recently somebody told of cancer of the stomach giving rise to vomiting. I examined my vomitus and I found some red specks,—they were really something of the food taken—I became so terrified that I felt like one benumbed with fear, I was paralyzed with fear. All I knew and heard of cancer, of the suffering and death came clearly before my mind and overwhelmed me with a flood of blind fear.

"While I write this account for you a mosquito hovers round me. I am afraid of this mosquito, having heard and read of the terrible diseases these insects communicate to people. When I kill a fly I have to keep on washing my hands endlessly,—I am afraid perhaps the fly carried some terrible infection.

"The sight of blood is apt to make me faint. I think of sickness and death. Blood is to me the shedding of blood, it is death. Sometimes this feeling is quite strong with me, and sometimes I just feel apprehensive or a short time until some other fear takes its place.

"What makes me specially apprehensive is the fact that the fear tends to spread to more and more objects and interests of life. My fears grow and become more extensive involving more parts of my being. I am afraid that the fears will finally end by paralyzing all my vital activities. What then? To escape my obsessions I employ all kinds of subterfuges. I get nowhere. I avoid one fear only to get into another. I become more and more entangled in the mesh of fears, like a fly in a spider's cobweb. My life is h-ll."

XIV

"I had a fear of a peculiar steamboat whistle; I had fears, during a certain period, of the end of the world; and I was afraid of harshness or unkindness. I have been more fearful than other people, I have been anxious about many things. I may say that I think my fears have always been along the line of my ideals, as soon as I began to have any. Thus, in early childhood I thought nothing of the future, and my fears were consequently limited to my present personal comfort. I may not have heretofore mentioned that I was always, at least after nine or ten years of age, rather timid before strangers. I shrank from harshness and abruptness in tone and manner.

"With the onset of malaria, between the ages of nine and twelve, I naturally thought more of the subject of disease, but even then my fears were directed principally, if not wholly, to the particular trouble which was present. I worried, because the chills could not be broken. I also had fear of kidney trouble about that time, and a little later, I had a fear of seminal emissions.

"A general sense of self-distrust began to show itself when I first realized that I was being raised differently

from other boys and was being criticized in consequence, and, furthermore, that I could not feel at home in their company, due to my ignorance of their life and their ignorance of mine. Since then, many causes have conspired to make me timid, among which had been my sexual life.

"All through my later life, whenever the importance of health has been emphasized in my thinking, my anxieties have run in that direction, and I have feared that I would not be physically strong enough for the battles of life. Whenever, as between the ages of fourteen and twenty especially, I have dwelt much in thought upon the importance of living in accord with religious precepts, I have feared that I should deviate therefrom—especially as there appeared to be looming up in my life a very powerful temptation. When, later on, I lost faith in the supernatural element in religion, there still remained the intense fear."

XV

"During my boyhood I was more or less persecuted by a conviction that if I did not go downstairs in a certain way I should be hung, or that if I did not touch every post in a certain fence I was passing, something alarming would happen to me, and I have been interested to learn since that others have had similar delusions, notably Samuel Johnson, the English writer.

"After graduating from the medical school, I talked with men who were going to various parts of the country to practice, and it was a matter of astonishment to me that these men could contemplate going far away from home and friends, especially to engage in such a profession which I personally felt about as competent to engage in as a ten-year-old boy. I could not even induce myself to take a position in the

hospital in Boston, although I felt that it would be an excellent thing for me. I was afraid of the unclean, ugly diseases, the maimed bodies, the contact with the patients and the internes and physicians who understood and enjoyed those things which simply terrified me—so I went home.

"I had much time on my hands and had periods of great despondency and fear, when I would take long walks in the country where I learned much about bird-life which has been a great comfort and help to me, though in later years, as I have had more to do, I have lost much of my knowledge, my interest in it. I felt that I should employ my leisure or a portion of it, in the study of my profession, but the thought of it was so repugnant that I actually accomplished very little.

"On the several occasions when my father went away and left his practice on my hands, I suffered horribly, but I accepted the situation, because it seemed to be unavoidable. It was my fate. The thought of revolt never seemed to have occurred to me.

"When I was a student in the medical school, I woke one night with some abdominal pain, not particularly severe, but soon I began to shake violently so that the whole bed moved. I have been subject to such nervous chills ever since. Sometimes they come at rather frequent intervals, and then I may go perhaps a year without one. Of late years, I am often ill for a day or two after them, with loss of appetite, general malaise, etc.

"After the death of my wife and after I had resumed work I had a most striking psychological experience, I was in a state of spiritual exaltation.

"I had the kindest feeling for everyone, and everyone seemed to feel the same way toward me, but here is the remarkable thing about it; I seemed to be living two distinct lives at the same time. One was the

ordinary everyday life of walking, working, eating, and drinking, and the other a higher, serene spiritual life which the small occurrences of the other life did not affect in the least. In the higher spiritual life I seemed to be very near my dead wife. I wrote a letter to friends at the time describing this experience and afterwards tried to recover the letter, but it had unfortunately been destroyed. I am not in the least in doubt about the two states in which I lived for the experience was as vivid as any I ever had in the material world, but the thing seemed to me rather unusual, and I thought the letter might throw some further light upon it. How long this state of exaltation lasted I do not know.

"I gradually built up a little practice, confined to the eye and ear. I belonged to numberless local organizations which occupied my evenings.

"All this time I was much depressed and worried. In 1908 I felt that everything that I did in a business way was wrong, that I never was able to satisfy a patient, and that I was losing what little practice I had. I remember sitting alone in my office one afternoon, putting my head down in my arms and saying aloud, 'I don't deserve it, I don't deserve it.' About this time I was haunted by the suicide idea. In my terrible mental distress this one idea seemed to give me relief—to offer a solution. When I went to bed at night at this time I would hear a persistent, rhythmical squeak in my chest which kept me awake. On examination by a specialist this proved to be a functional sound. I was advised to stop smoking which I did, and the squeak disappeared. The mental condition also improved.

"I took up my work, although feeling that it was impossible for me to do it.

"Each morning, with the exception of one, I woke

very early and suffered mental tortures. Sometimes when I first became conscious after waking, I would be comfortable, but sooner or later the distress would come. It seemed to me that I had a terrible problem to solve, but I could not reach a satisfactory conclusion. The problem concerned my success in life and earning a livelihood, and failure to solve it meant insanity. I felt that I must do something radical, start out in some new line of work, like public welfare work or possibly some form of agriculture, but always in these early morning agonies I was forced back upon my own special work as the only practical thing and a horrible fear seized me, I realized that there was no escape from it.

"At these times I would shake violently with fear, and once I seemed to have descended into the very abyss of despair where it would be impossible to live for many moments. I am sure that I should have rushed from my room screaming, if the fear had lasted. Once, years before, after great emotional excitement, I had had a similar sensation, but not as pronounced. I rose each morning with paralyzing fear gripping me, and mechanically performed my duties as school physician.

"After a time I told my father of my condition, but I felt that I could not make him understand the situation in which I found myself. One morning I found relief in assuring myself that I would keep on with my work, but would not take any of the cases which I dreaded; the relief was only temporary.

"At another time, after a talk with my father in which he talked encouragingly about going into apple raising, I had a more comfortable night.

"I took a course of treatment, dieting, drinking Vichy and taking exercise without any appreciable effect. My father offered to stay with me, on account of my

terrible loneliness and fears; at first I declined, but later accepted, and found some comfort in feeling that he was near.

"With the idea that I must do something to save myself from losing my grip, I forced myself to prepare for operation, but perhaps fortunately for the patient, although I got everything in readiness, he did not appear.

"Often, especially if I had some exercise in the morning followed by a bath, I would feel quite normal in the afternoon and in the evening.

"For a time during the early morning distress it seemed as though there was some solution to my problem, but after a time I could not tell what was the cause of my great mental distress which would not allow me to rest, but tortured me until I writhed and groaned. Then the fear of failure, poverty, destitution, and disgrace, seemed to take possession of me, and I remember one morning, before my father was sleeping with me, that I woke him and got him to assure me that he thought I was able to earn my own living.

"These fears which came up in my business and even social life, would take possession of me in the early morning hours and torture me with terror and horror. I found some relief in talkng these matters over with my father and step-mother and getting their advice.

"Invariably, when I felt normal, it seemed to me that I ought to get away from everything and get some kind of work that would give me plenty of exercise out of doors and freedom from mental effort, but when the fear and depression gripped me again it all seemed hopeless.

"If, when I returned from abroad last fall, I could only have found someone among those to whom I confided my troubles, who could see that I was incapable of doing anything for myself, and taking things on their

own hands, have sent me where my mind could have been relieved of all unnecessary worries, my body supplied with plenty of wholesome exercise in the open air and abundance of good food, I might have been saved from months of hideous nightmares."

XVI

"In plain English I am 'self-conscious.' I have this self-consciousness in a most acute form. I would be classed as a monomaniac on the subject, and, silly as it may seem, it is ruining my whole life.

"I don't think that as a boy I was diffident or bashful to a marked degree. This self-consciousness was acquired and grew on me. Up to the age of fourteen I could 'speak' at school and do the other things that boys of that age do without embarrassment, but one day at about that age, I arose to recite. I got a little mixed up and a little 'rattled,' when I sat down the boy behind me commenced to 'guy' me, told me how red my face was, etc., and kept it up for some time and it seemed to prey on my mind. The next day when I arose to recite I commenced to fear lest my face would get red again and the first thing I knew my face was burning and my voice shaking. From that time on I was never able to get up in school and recite without fearing that the pupils were watching me to see how red my face would get and how embarrassed I would look, and that fear, 'imagining,' did the work. Finally out of pity the teachers excused me from speaking, or I should say attempting to speak before the school and reciting before the class.

"After I left school I appeared to get better along that line. My father was cashier of a bank, and after taking a course of shorthand at a business college I went to work there. All this time I was always self-

conscious and prone to blush, but the newer surroundings made it easier for me than with all of the scholars who knew my weakness.

"During the last few years the fear has been growing on me again and in some respects I am worse than I ever was before in my life. If I pass a friend on the street who knows my weakness, I at once proceed to get much embarrassed and 'red'. I fear that he is watching me to see me do that very thing and so do not disappoint him. The horror, and it is a horror, with me, of getting red in the face is with me every minute that I am awake. The confidence that I should have to shake it off I do not seem able to get. If there is something that I am obliged to do that will bring me into a little prominence, such as attending a dinner (that I cannot get out of) I will worry for days for fear that I will make a 'fool of myself,' and of course, this previous worrying does not help to put me in good shape when the time comes.

"I could go along writing several pages, but I think that I have said enough to enable you to see how this 'fear hallucination' has a hold of me. I am sure that I am not of a retiring disposition naturally, I enjoy the society of both sexes. I can go, say on a moonlight automobile trip and be just as natural and as much at ease as anyone, but to sit down to a dinner, commence to imagine that the people are glancing at me to see whether I am getting red in the face and then, as the boy says, 'the stuff is off.'

"There was one thing I could do, I always took an intense interest in baseball and played it for years. On the ball field I had absolute confidence in myself, and could get up before any number of people without the least bit of embarrassment or nervousness in the tightest places. In fact, once when our team was playing in another town, in writing up the game the next day, the

editor of the paper stated that 'Young G. has the nerve of a Von Moltke; he never gets excited or rattled.' Now if I can get some of the confidence that I had on the ball field in my business and social relations it would mean a whole lot to me, otherwise I am more or less of a failure. Lately, I have been having periods of depression and at time I feel that I would almost welcome anything to end this foolish fear.

"You probably think that I am lacking in will power and I surely am in this one respect at least, but I have been successful in a business way.

"My father is state accountant and has been for the past five years. During this time I have been cashier in reality, although I wouldn't accept the office and name. The directors have voluntarily raised my salary at different times, and I know that my business judgment is respected; but this other matter, silly as it may seem, keeps gnawing at my nerves and I feel that some of these days, unless I am able to shake it off, that I will be a nervous wreck or go insane. It is a *fear hallucination*, pure and simple, but I must get rid of it soon."

XVII

"From my earliest recollections I was an unusually brave child and proud of my bravery. Older brothers, on account of this, tried to frighten me in every manner possible. One appeared with a false face and frightened me so that I have ever since been afraid of everything else. Throwing chickens at me also resulted in my being afraid of all feathered animals since. Even a bunch of feathers gives me an unhappy, frightened feeling. Being bitten several times by dogs has made me fearful of dogs, and contributed to my general nervousness.

"When about five years old (the year I received my first serious fright) I snapped a rubber in my left eye, turning the pupil in. Children teased and made fun of my eye, calling me 'cross-eye,' and thus made me nervous, sensitive, and uncomfortable in company. Also, perhaps, turned my thoughts in a morbid, self-conscious channel, to which other incidents have contributed since then.

"I did not go to school until I was eleven years old, on account of my sensitiveness about my eye. My mother, also of my disposition as to sensitiveness, taught me at home. At eleven, I was operated on, the pupil coming back into its proper place. Since then, I cannot read with my left eye. My eyes water when out of doors, and I can with difficulty keep them open. When embarrassed or annoyed my eyes have a queer feeling over which I have no control. It makes me so uncomfortable to think I cannot keep my eyes from showing my inner feelings so readily. I believe it is due to their weakness. My right eye, with which I read constantly, has for the last few months felt blurred.

"My grandmother came to live with us when I was about seven years old, and, I think, ruined all our dispositions by scolding, nagging, and slapping us almost constantly. We could not do the slightest thing, stand still, or sit down without a scolding. From being of a sunny, bright disposition, I became morose and sullen and am continually looking for affronts and brooding over them and have developed a disposition to worry over trifles and never to feel certain that I have taken the right course in anything, also to have a morbid sensitiveness to and fear of the opinion of others and never to feel happy or satisfied in any place. I am always looking forward to next year, or next month, or to going some other place, where things will be more pleasant.

"When in company, I never seem to know what to say, and in my nervous fear, I say too much and afterwards feel an agony of mortification over remarks that I regard as absurd. From this fact, I think, I have very few friends. My peculiarities, due to my nervousness, all of which I am acutely conscious and worry on, cause me to be alone wherever I go. I try to please people and go out of my way to do favors for friends, but I am unpopular, because of the mannerisms and self-consciousness I possess.

"I taught school six years, and worked faithfully early and late. Being accounted a good disciplinarian, I was given some hard rooms to teach and was kept in nervous tension all the time. My last year teaching was begun in my home town, and I was given a room of the worst children in town; and, being sensitive to the opinions of my home people, I felt hampered to carry out as strict measures of discipline as were necessary; but for the same reason I hated to give it up.

"My mother's health gave out and, my father's work being in F. that year, I asked for leave of absence and we went to F. in January. While there I was continually worried over the thought of my return to school and in April I heard a friend remark that I was growing hard of hearing, and when I reached home in May, a noise in my ears started and has never ceased. Dr. Mayo of Rochester treated my ears and cut out my tonsils and cauterized my nose to help my hearing, but I have grown steadily worse. This was in 1906. The noise in my ears aggravates my nervousness. My voice seems affected so that people have difficulty hearing me. In company I sometimes dread to speak at all. I took up shorthand and typewriting, but lost two positions on account of my deafness. I nearly always feel tired and lacking in energy, due to my nervous fear and apprehensive thought. I have read so much that I seem to

exist in a world of books quite apart from this world of reality, and am only contented when poring over a book.

"As a child, I was timid, apprehensive, full of fears. As I grew older, I could be easily made angry and seemed to lose all control of myself when angry. I cannot answer anyone who affronts me, because I lose all control of my nerves, eyes, and voice. I feel paralyzed with fear and anger."

XVIII

"'From childhood I have always been extremely timid. The illness and death of my youngest and favorite brother seven years ago was a particularly distressing one, which rendered him completely helpless for a year and a half, during which time I dreamed of his death or some scene connected with his illness would occur. For a year after his death I scarcely passed a night without dreaming of him nor a day without feeling the loss, so constantly had we been together and so deep were my love and admiration for this witty, clever brother who had always been so kind and considerate.

'During the past four years I have experienced several peculiar dreams. The last of them was last August in M. when, for the first time since her death in January, I dreamed of my mother. She looked at me pityingly and embraced me, holding me for a long time as though to give comfort. The dream was very real. The following day a letter reached me from a friend at home; a real estate dealer saying that he thought he should probably be able to make a sale of our old house to the man he had had up to look at it the preceding day. Having the house pass into other hands and the prospect of my having to leave it all had been much

on her mind during her last illness of which my brother's family next door had knowledge.

"The fall preceding mother's death I had been away from home several weeks in K., taking treatment for my stammering. Mother became aware that her condition was growing serious and though she did not write me at all differently from usual and, although she concealed her condition from my brothers who were near her, I seemed to know it and reluctantly went to spend a short time with my foster-sister, as my mother wrote to urge me to do, during the whole of which time I felt apprehensive about my mother, and I began to stammer severely.

"My father's illness was longer, and during it, upon our physician's advice on the return of my foster-sister from school in the spring the family persuaded me to go away for awhile. For a couple of weeks I enjoyed my visit when all at once with so far as I could judge nothing in the letter to indicate much of a change in his condition, I became apprehensive and felt that I must return at once. But because my little nephew was to return with me and the journey was a long one and each day his pass was expected, I unwillingly waited and was not surprised when we received a telegram saying that my father was dead.

"Last June, at the time of my operation at M., I had decided hastily and did not think it wise or necessary to inform any of the members of the family. I was ill with the shock afterward and wished very much for my foster-sister, but she was too far away to be sent for, and I improved so rapidly so I wrote her at the usual time in the usual way without mentioning the operation. Before even this could have reached her, I received a letter from her, saying 'what is the matter,' 'I know you are ill.'

"Why does it prove a strain to meet strangers and

to be with people for long at a time? I believe one of the causes to be the great amount of criticism to which I was subjected in childhood both before guests and after their departure, and to be with people, which made a very deep and painful impression on my mind. My little girl cousin who lived with us was extremely exacting, and, while there was really a warm affection between us, there were constant differences and constant irritation, and unless my brothers interfered, if there was harmony it was only secured by my giving way to her. Of course, I was not blameless in the matter, being unduly sensitive, often teasing and disliking a fuss above all things and never being strong.

"Until the last years of his life my father used to, at long intervals, indulge in fits of drinking in which he became violent, and I have often seen him take a knife and threaten to kill my brothers when they kept him from going out for more liquor, and they would have to hold him and soothe him. The fear of disgrace, the horror of it, and my mother's grief, made a deep impression. We never spoke of it, of course, to outsiders, and seldom in the family except when we would become apprehensive that he was starting to drink."

XIX

"I am a married woman of fifty-two. All my life I have been imprisoned in the dungeon keep of fear. Fear paralyzes me in every effort. If I could once overcome my enemy, I would rejoice forever more.

"In childhood everything cowered me. I was bred in fear. At five or six my mother died, and I feared and distrusted a God who would so intimidate me and bereave me. I heard tales of burglars, being discovered in hiding under beds, and a terrified child retired nightly for years. I was in agony of fear. My fears I never

told. Later I heard of the doctrine of God's foreknowledge, and, as a little rebel, I would place dishes on the pantry shelves, changing from place to place, and then giving up in despair, knowing that if foreknowledge were true, God knew that I would go through with all that performance.

"Through childhood I feared suicide. It was a world of escape that appealed to me and yet appalled me. I also heard of somnambulism, and I never saw a keen bladed knife, but I dreaded that in my sleep I might do damage to myself or to my friends in a state of unconsciousness.

"In my twenties I did attempt suicide a number of times, but somehow they proved unsuccessful. I always aimed to have it appear an accident. I dreaded to have my death appear as a stain and disgrace to my family which I loved.

"I always fear to walk at any height, on a trestle over running walls, or even to walk on a bridge without side railings.

"As a child I was afraid of the dark, I was afraid of going out on the street in a dark night. In fact, even a moonlight night terrified me when I remained alone. I was afraid to go into dark places, such as cellars, or into lonely places even in the day time.

"As a child I was always shy, fearful, timid and self-conscious to a painful degree. Even as a grown-up woman I am often a sufferer from the same cause, although I have sufficient self-control to conceal it.

"I have to be careful of my state of health, as the latter is very delicate. I am a chronic sufferer from indigestion and constipation, although I somehow manage to regulate these troubles.

"When I need my nerves in good control so frequently, they are in a state of utter collapse. My brain is in a state of confusion, in a state of whirl

just when I need to think the clearest. My poor brain feels as if a tight band encircled and contracted it. It seems to me, as if the brain has shrunken from the temples.

"My memory is unreliable. Often I read quite carefully, but I am unable to recall what I have read. Especially is this so, if called upon without previous warning. My brain goes into a panic of an extremely alarming kind.

"I was told that I was a woman of a good brain and of great talent, that all I needed was to exercise my will and determination, and that I would succeed. I lack concentration and I lack confidence.

"In my childhood hell fire was preached. Fire ordination and an arbitrary God were held up to my childish comprehension. I was bred in fear, and self-destruction resulted."

XX

The following valuable account given me by an eminent physician brings out well the main factors, laws, and principles of Psychopathology expounded in this volume:

"You asked me to write about my fears. I give you a brief account.

"As a child, as far as memory carries, I had a fear of darkness, fear of ghosts, of giants, of monsters, and of all kinds of mysterious and diabolical agencies and witchcraft of which I have heard a number of tales and stories in my early childhood. I was afraid of thieves, of robbers, and of all forms of evil agencies. The fears were strong at daytime, but more so at night. Strange noises, unexpected voices and sounds made a cold shiver run down my back.

"I was afraid of remaining alone in a closed room, or in the dark, or in a strange place. It seemed to me as if I was left and abandoned by everybody, and that something awful was going to happen to me. When I happened to be left alone under such conditions I was often in a state of helplessness, paralyzing terror. Such states of fear sweep occasionally over me even at present. I find, however, that they are far more complicated with associations of a more developed personal life. I know that in some form or other the fears are present, but are inhibited by counteracting impulses and associations. I still may feel a cold shiver running down my back, when I happen to go into a dark cellar in the dead of night, or happen to remain alone in a dark, empty house. Such fears date back to my fourth year, and possibly to an earlier time of my childhood.

"As a matter of contrast-inhibitions of such fears I may either brace myself and put myself in a state of courage and exaltation, or when this does not succeed, I let my mind dwell on other fears and troubles. I find that the last method is often by far the more effective in the inhibition of fear states which at the moment are present with me. All I need is to press the button, so to say, and awaken some other fears, the present fears diminish in intensity and fade away for the time being. I actually favor and welcome and even look for disagreeable and painful experience so as to overcome some of my present fears. The new fears are then treated in the same way.

"As I became older, about the age of eight, I began to fear disease and death. This may be due to the infectious diseases that attacked many members of our family when I was about the age of eight. In fact, I have been present at the death bed of some of them, and the impression was one of terror, mysterious

horror. I was afraid I might get diseases from which I might die. After my witnessing the last agonizing moments of death, my elders thought of removing me to a safer place; their fears and precautions still more impressed the fear of danger of disease and death. I may say that I really never freed myself from the fear of disease and death. The latter fears are always present with me in a vague, subconscious form, always ready to crop up at the least favorable opportunity. This fear, in so far as it is extending its tentacles in various directions, is often the bane of my life. Even at my best there is always a kind of vague fear of possible danger, lurking unknowingly to me in various objects which may be infected, or possibly poisonous.

"This fear has been spreading and has become quite extensive, involving my family, my children, my friends, my acquaintances, and my patients. Usually I ignore these fears, or get control over them by an effort of will. When, however, I happen to be fatigued, or worried over small things by the course of my work, or happen to be in low spirits by petty reversals of life, these fears may become aroused, as if from slumber, and may come forth in their pristine vigor. Under such conditions I may become afraid, for instance, of drinking milk, because it may be tuberculous.

"This fear may spread and involve fear for my children and my patients; or again I may be afraid of eating oysters and other shell fish, because they may be infected with typhoid fever germs. I may refuse to eat mushrooms, because of the possibility that they are poisonous. The other day I was actually taken sick with nausea and with disposition to vomiting after eating of otherwise good mushrooms. The fear seized on me that they all might be poisonous 'toadstools.' Such fears may extend to ever new objects and persons. The spreading of the fears to ever new relations and to

ever new associations is possibly the worst feature of the trouble.

"I have a fear of coming in contact with strangers, lest I get infected by them, giving me tuberculosis, influenza, scarlet fever, and so on. This mysophobia involves my children and my friends, inasmuch that I am afraid that strangers may communicate some contagious diseases. A similar fear I have in regard to animals,—they may possibly be infected with rabies, or with glanders, or with some other deadly, pathogenic micro-organism. I am afraid of mosquito bites, lest they give malaria, or yellow fever. The fears, in the course of their extension, may become even more intense and more insidious than the original states.

"About the age of fourteen I began to be obsessed with sexual fears. Advice was given me again and again that all sexual acts and sexual errors make boys sick and finally result in a lingering, terrible death. Such advices often threw me into a panic, on account of the fears I already had. The fears grew in strength and complexity. I was often seized with terror over the least imaginable sexual trouble, thinking that I was to become a wreck, and that I was surely going to die a miserable death. Occasionally I was seized with the fear that my brain might give way, and that I would die in agonies, a miserable dement.

"I have also a fear of dogs. As a child I had some bad experiences with dogs. I was attacked by dogs and was badly bitten. Although this fear is no longer so intense as it was in my childhood, still I know it is present. My heart sometimes comes to a sudden standstill, when I happen to come on a strange dog. When the strange dog growls and barks, all my courage is lost, and I beat an inglorious retreat. It is only in the presence of other people that I can rise to the effort to walk along and apparently pay no attention to the

dog. This is because I fear the opinion of others more even than I fear growls of dogs. My social and moral fears are far greater than my purely physical fears. Fear has invaded my mental and physical organization.

"When I became older, about the age of eighteen to twenty, a new form of fear appeared, like a new sprout added to the main trunk or possibly growing out of the main fear of disease and death, that is the fear of some vague, impending evil. The fear of some terrible accident to myself and more so to my family or to any of the people of whom I happen to take care is constantly present in the margin of my consciousness, or as you would put it, in my subconsciousness. Sometimes the fears leave me for awhile, sometimes they are very mild, and sometimes again they flare up with an intensity that is truly alarming and uncontrollable. The energy with which those fears become insistent in consciousness and the motor excitement to which they give rise is really extraordinary. The fears come like sudden floods. The energy with which those fears rise to consciousness is often overwhelming.

"Fears get possession of me under circumstances in which my suspicions are, for some reason or other, aroused to activity, all the more so if the suspicions of possible impending evil are awakened suddenly. In other words, the fears arise with the stimulations of associations of threatening danger to myself and to my family. I am afraid that something may happen to my children; I fear that they may fall sick suddenly; I fear that some terrible accident may happen to them; I fear they may fall down from some high place and be maimed or be killed. I fear that my children and other members of my family may be poisoned by people who are not well disposed towards them. I am afraid that they may pick up food that was infected, or that they may be infected in school by children who happen to

suffer from some infectious maladies. I am afraid that my children may be overrun by some vehicles, by automobiles, or that they may be killed in an accident, that they may be killed by the street car, or even that the house may collapse. This latter event has actually taken place when I was a child. In fact many, if not all of those fears have actually their origin in my experience.

"As I write to you these lines many a memory of such events come crowding upon my mind. Are they the noxious seeds that have been planted on the soil of fear? I am afraid sometimes that even the food I and my children as well as other people eat may give rise to toxic products and thus produce disease. Often in the dead of night I may come to my child in order to convince myself that he has no fever and that he is not threatened by any terrible disease. The very words 'sickness,' 'disease,' 'not feeling well,' 'death,' arouse my fears and sometimes throw me into a panic. I am afraid to use such words in connection with any of my children. I am afraid the evil mentioned may actually happen.

"As a child I learned about testing and omens. If such and such a test will come through in a certain way, it is an omen of good luck, otherwise it means bad luck. This superstitious testing and omens have remained with me, and that in spite of my liberal training and knowledge of such absurd superstitions. I may test by opening the Bible at any page, or I may test by anything that might occur according to my guesses. All of those fears I know have no meaning for me, they are senseless and absurd, but they are so rooted in my early childhood, they have been so often repeated, they have accumulated round them so much emotion of fear that they come to my mind with a force which is truly irresistible. Many of the fears have multiplied

to such an extent that I cannot touch anything without arousing some slumbering fear. On the other hand, I am enabled to play one fear against another and some times obtain counteracting contrast effects.

"To continue with my fears. I am often afraid that the doors are not well locked, and I must try them over and over again. I go away and come again, and try and try again, and once more. It is tiresome, but as the fear is constantly with me and is born again and again, I cannot be satisfied, and must repeat the whole process over and over until I get tired, and give up the whole affair in sheer despair. In such cases a contrary and different fear comes in handy. One devil banishes another. I am afraid that the gas jet is left open, and I must try it over and over, and test the jets with matches. This process of testing may go on endlessly without assurance,—the fear remains and the process must begin again until it is stopped by sheer effort of will as something meaningless, automatic, and absurd. The performance must be stopped and substituted by something else.

"Colds or attacks of influenza of the mildest character have given rise to fears of pneumonia. Pains in the abdomen or a little intestinal distress have awakened fears of possible appendicitis, or of tumor, or of intestinal obstruction. The least suspicion of blood in the stools awakens the fear of possible cancer. Vomiting or even nausea brings fears of cancer of the stomach. There is no disease from which I have not suffered. The only diseases I have not feared were female diseases.

"The same fears have naturally been extended to my children and to all those who are under my care. The least symptom is sufficient to arouse in me fears of possible terrible and horrible consequences.

"I am afraid that suits may be brought against me, or that some of my own people, patients and even employees whom I discharge may bring legal action against me in court, or blackmail me. When I leave home, I am afraid that something terrible has happened. The fear of impending evil is always with me. The fears have invaded every part of my being. It seems as if there is no resistance in my mind to those terrible fear states.

"Perhaps it may interest you to know that, although I am quite liberal and am even regarded as irreligious, still I am afraid to express any bad word against God, Christ, saints, martyrs of any church and denomination, be they Christian, Mohammedan, Buddhist and even pagan such as Apollo or Zeus or Jupiter or Ahriman and Ormuzd. I am afraid lest they may hear me and do me harm. I fear to say a bad word even about the devil and Satan. I am obsessed by fears. Fears pursue me as long as I am awake, and they do not leave me alone in my sleep and dreams. Fears are the curse of my life. And yet I have control of them, none but you has any suspicion of them. I go about my work in a seemingly cheerful and happy way. The fears, however, are the bane of my life, and torture me by their continued presence.

"I tried to find whether or no those fears had any relations to my wishes or to my sexual experiences. I must say that I find that they bear no relation whatever to wish or sex. My mental states grow on fear, take their origin in fear, and feed on fear. Fear is the seed and the soil of all those infinite individual phobias that keep on torturing me without mercy, phobias which I must control by a supreme effort of will.

"Truly the Biblical curse well applies to my life:

"'The Lord will make thy plagues wonderful, and the plagues of thy seed, even great plagues, and of long

continuance, and sore sickness, and of long continuance. Moreover, he will bring upon thee all the diseases of Egypt, which thou wast afraid of; and they shall cleave unto thee. And every sickness, and every plague, which is not written in the book of this law, them will the Lord bring upon thee, until thou be destroyed. Thou shalt find no ease, neither shall the sole of thy foot have rest; but the Lord shall give thee a trembling heart, and failing of eyes, and sorrow of mind. And thy life shall hang in doubt before thee; and thou shalt fear day and night, and shalt have none assurance of thy life. In the morning thou shalt say, Would God it were even! and at even thou shalt say, Would God it were morning! for the fear of thine heart wherewith thou shalt fear . . .'

"I laid bare my soul before you. I permit you to do with this document whatever you may think fit."

In all these various cases and accounts we find the pathological background the impulse of self-preservation with the fear instinct highly intensified, invading more and more the life of the individual while the available fund of his dynamic energy keeps on falling. At the same time we can observe clearly the main psychopathological principles, formulated above, in the evolution of psychopathic mental aggregates.

Most of these patients were cured by hypnoidal, twilight treatment, by disintegration of the fear systems, both in the waking, and hypnoidal states, also by a healthy life of work and by an improved condition of metabolism. About seventy-five per cent remained in good condition, and could be regarded as having been permanently cured. Out of the twenty-five per cent left about twenty per cent improved in their mental condition, and five per cent did not respond, on account of the short time of treatment.

The course of treatment of psychopathic cases averages from half a year to a year and a half. In severe cases the course of treatment may take two to three years. Patience and perseverance are requisite in the treatment of each and every psychopathic case.

On the whole, psychoneurotic cases are easier to handle than psychosomatic cases, but somatopsychosis yields more rapidly to treatment, especially in young persons, than do cases of psychoneurosis. As a rule men are easier to treat than women.

CHAPTER XVII

GENERAL PSYCHOTHERAPEUTIC METHODS

THE overcoming of the exaggerated pathological state of the impulse of self-preservation and of the unduly developed fear instinct with all the accompanying associations is the object of a rational Psychotherapy. This is done by studying closely the patient's history, the development of the case from early childhood, by learning the various fears that have grown up, and have become formed round the nucleus of personality. Everything in the patient's life should be studied closely, sympathetically, without condemnation and blame. The patient's views of life should be well looked into, and the defects and mal-adjustments put in such a light that the patient should realize where the faults and shortcomings lie. The matter may be put before him in an indirect way of research, but the patient himself is to assimilate the material, laid before him; he is to work the matter into the spirit of his personal life. Our help should rather be that of the guide, should be indirect, and should only be open when the patient realizes the importance of our aid, and asks for it himself. Of course, there are cases where it is requisite to put the findings before the patient directly, fairly, and squarely. This is a matter of the physician's judgment, and no cut and dried rule can be laid down in such cases.

We must help the patient straighten out his warped personality. The exaggerated pathological state of the impulse of self-preservation should be moderated, the fears should be eased, controlled gradually, and completely annulled. The patient should not be left to

himself, he should not be abandoned to the chance influence of other people while under treatment. He should feel that he has the physician with him, that in case of need he has a man on whom he can absolutely rely for help, a man who understands him, who is always willing to help him, and deliver him from all scares and fears.

Light cases of psychoneurosis or of somatopsychosis may be treated in the office for a few minutes or for half an hour twice or three times a week. In severe cases, however, the patient should be constantly under the physician's care until he is delivered from the worries of his fears and from the obsessions of his pathological impulse of self-preservation. The work of reconstruction must be not only persistent and systematic, but must also be carried on incessantly and unremittingly.

Mental anabolism, the construction of personality, is the object of therapeutic work in psychopathic maladies. The psychopathic malady being essentially a disease of personality in various stages and degrees, the cure is the gradual modification of the pathological state of the affected mental systems, conscious and subconscious. The subconscious systems predominate in the total aspect of the psychopathic symptom complex. That is why it is requisite to go into the subconscious workings of the mind and to inform oneself of the early experiences of the patient's as well as to observe closely the patient's habits, dispositions, character, mental and moral, his views of life, his actions, and be specially informed of the environment under which the disease had its origin, or of the psychogenesis of the affection, and of the further conditions under which the malady kept on growing and developing. The present environment under which the patient lives, the mode of activity and occupation, the duties and the responsibility of life,

and the various relations, family, social, economical, political, religious, and ethical, should all be taken into consideration and closely considered in the treatment of the case. In short, the patient's mental life should be subject to a thorough searching study, the case should be looked at from all standpoints.

The physical condition should not, however, be neglected, because quite often, as it is in some psychopathic cases, the physical symptoms form nuclei round which the psychopathic affections and manifestations become organized in clusters of symptoms. This is especially the case with psychosomatic patients. The physician should, therefore, devote time to that side of the patient's life. The cardiac, the circulatory, digestive, and urinary systems should be examined and attended to.

The Method of Metathesis and of Emotional Antagonism is often consciously or unconsciously employed by psychopathic patients. When a fear becomes annoying, troublesome, and uncontrollable the patient calls up some other fear replacing the present fear which has occupied the field of attention. This forms a relief to the patient. This process often helps in the spreading of the psychopathic state to other mental systems. Temporarily, however, there is some relief. Many a patient who has learned the value of this method employs it as a subterfuge to escape the terrors of facing his fear systems. The study of the fear systems, the discussion of the various aspects of the fears in their origin and development helps both to face the fears, and at the same time brings about a transference of emotional fear agitation. This helps to moderate the fears by bringing about mutual antagonistic reactions. One fear may be skilfully played towards the neutralization of others. The patient, however, should be unaware of it. The neutralization of pathological systems by antagonistic fear

systems is important, but the method is dangerous and should only be employed after careful consideration of each step so as to get effects of interference and inhibition and not effects of increase and superposition of morbid emotion. Each case should be treated on its own individual merits. There are no cut and dried rules in Psychotherapy. The work with this method requires a good deal of tact, foresight, and insight into the personal character of each patient. What may be effective with one patient may turn out a failure with another.

The synthesis of dissociated systems and the transformation of the patient's personality should be brought about by a slow and gradual process of system modification. New experience, new knowledge and activity, mental and moral, should be cultivated. The new material acquired and assimilated into the patient's personal life, as well as the new ways of thinking and acting help in the modification of the various systems which form the nucleus of the psychopathic state. The modification, although performed gradually, may in the long run amount to a complete metamorphosis of the patient's states, and thus bring about a complete synthesis and transformation of the morbid mental and emotional systems, both conscious and sub-conscious. The enlargement of the patient's mental horizon and activity is indispensable to a permanent cure. This, however, from the very nature of the work, must be effected slowly and gradually.

The Method of Disintegration is of import in Psychotherapy. The disintegration may be brought about by associating various aspects of the patient's systems or insistent ideas with disagreeable moods or with counteracting systems, or by a clear comprehension of the silliness, and lack of adaptation of the ideas and their ultimate harm to the patient, by a realization of the

lack of rationality and meaning of the recurrent states. Again, the disintegration may be accomplished by convincing the patient that the interpretation he puts on the facts is quite erroneous, and that the *meaning* is altogether different from what he or she ascribes to the symptoms. What the patient thinks as meaning illness, sickness, mental or physical, is really either indifferent or actually the manifestation of something good and healthy. The evil may thus be turned to good account. This may be done directly or indirectly by various insinuations which often are even more impressive and lasting than direct explanations.

I have shown in my "*Psychology of Suggestion*" that of the forms of suggestion, the direct and the indirect, the direct suggestion is specially adapted to the hypnotic condition, while the indirect is adapted to the waking state. It is possible to use both forms, the direct and indirect. This should be borne in mind when we are using the various methods in the waking state and more specially in the hypnoidal state, a state which we have described in our former works and which we shall describe further on in this volume.

The Method of Disintegration by interpretation may be practiced, by putting a special construction on the experiences and the symptoms of the psychopathic patients. Some psychopathologists express it by saying that they find the "real meaning" of the symptoms. In other words, what they do is to find a meaning which is harmless and even useful to the patient in his adaptations instead of the harmful and morbid construction put by the patient. In most cases, as we have pointed out, the psychopathic symptom complex lacks meaning, it is simply a morbid series of manifestations due to some harmful events, associated with baneful experiences of early child life. This psychopathic symptom complex keeps on recurring, reproducing it-

self after the biological type of the recurrent moment consciousness, with no meaning except the ones that from time to time become accidentally associated with it. The patient may at one time give one construction and at another time may give a totally different meaning to the symptom complex. "The meaning" depends entirely on the patient's mood and on the subsequent experiences that help to keep up the fundamental symptom-complex. The patient does no more understand the condition than the savage can explain the meaning of many of his bizarre and absurd rites. The only reason, or meaning is the very fact that the ancestors of the savage have practiced the same customs from time immemorial.

If the physician learns to know the patient well and is able to give the morbid symptom complex a determination in a definite direction by supplying a good, healthy "meaning," and is able to work it into the tissue of the patient's personal life, a good deal of the battle is won. On the one hand it is requisite to associate the morbid manifestations with systems which are of little moment to the patient, so that he should underestimate the significance of the morbid manifestations; on the other hand the good manifestations should be associated with systems, charged with emotion of vital import in the patient's personal life. In this way the active pathological systems become dissociated and disintegrated into their component parts, and finally disappear from consciousness and subconsciousness.

This method of disintegration is by no means new. I have employed it for many years under various conditions and circumstances. The physician has to be careful in the use of this method not to associate the disintegrated portions of the mental systems with emotions or instincts which may indeed for some time give a different meaning to the morbid symptom com-

plex and thus deflect the discharge of energy in different directions or even completely inhibit all morbid manifestations of energy, but may work incalculable mischief in other directions. Such, for instance, is the case of the physician who plays with the sex instinct, keeps on arousing the intensity of the sex instinct and thus deflecting the morbid activity of the psychopathic systems in other directions, sexual in character. In this case the remedy is worse than the disease. Such patients run the risk of being morbidly introspective in the direction of the sex instinct into which the physician deflected the activity of the psychopathic groups. I have seen many patients who have become wrecks under the treatment carried out by that harmful, sexual, introspective analysis. Treatment along such lines should be discouraged by every sincere, intelligent, and conscientious physician. Nothing can be more harmful to the sensitive and already damaged personality of the pyschopathic patient. Many a patient came to me ruined in mind and debauched in soul by the supposedly well-meaning, but extremely harmful sexual analysis. I, therefore, warn the physician who wishes to devote his time to the practice in Psychotherapy to avoid sexual analysis, to avoid the formation of artificial sexual associations which in the end become the bane of the patient's life. The patient may as well be habituated to narcotics to still his troubles. Every conscientious and intelligent physician should be warned against the use of such detrimental and damaging treatment.

We have pointed out in our works that "a dissociated system present in the subconscious when coming to the surface of the upper strata of consciousness becomes manifested with intense sensori-motor energy. Dissociation gives rise to greater dynamogenesis. This *principle of dynamogenesis* is important, and cases

of so-called impulsive insanities and psychic epilepsy are really due to this cause, and are studied and treated on this principle with great success.

"A system entering into the association with other sytems is set into activity not only directly by its own appropriate stimuli, but also indirectly through the activities of the various systems associated with it. These associative interrelations bring about an equable and normal functioning activity, controlled and regulated by the whole mass of associated systems. The mass of associated systems forms the 'reductives' of each individual system. In dissociated systems the controlling influence of the 'reductive mass' is lost and the result is an over-activity, unchecked by any counteracting tendencies.

"This relation of dissociation and dynamogenesis is closely related to periodicity of function with its concomitant manifestation of psychomotor activity characteristic of all passions and of periodically appearing instincts. Dissociated systems present impulsiveness, because of the lack of associated counteracting systems. The only way to diminish the overpowering impulsiveness with which the dissociated subconscious systems make an onset in their rush into the region of personal consciousness is to bring about an association, to work the dissociated systems into the tissue of the patient's consciousness.

"Physiologically it may be said, that a neuron aggregate, entering into association with other aggregates, and being called into activity from as many different directions as there are neuron aggregates in the associated cluster, has its neuron energy kept within the limits of the physiological level of the total energy of the neuron.

"A dissociated neuron aggregate, on the contrary, is not affected by the activity of the aggregates; it is

rarely called upon to function, and hence stores up a great amount of neuron energy. When now an appropriate stimulus liberates the accumulated energy, the activity is overwhelming and is very much like the eruption of an underground volcano, giving rise to temporary attacks, to 'seizures' by subconscious states of the whole field of the upper consciousness,—'seizures' which being really of the nature of post-hypnotic automatisms are generally mistaken for epilepsy, the attacks being regarded as epileptic manifestations, as 'larval epilepsy,' as 'epileptic equivalents,' as 'psychic epilepsy.' With the restoration of equilibrium of the neuron-aggregates, with the synthesis of the dissociated systems, a synthesis which can be brought about by different methods, the subconscious eruptions, attacks, or 'seizures' vanish never to return. This principle of synthesis of dissociated systems is clearly demonstrated in our researches.

"In cases where a stably organized, pathological system is to be disintegrated by the artificial formation of counteracting systems, the principle of dynamogenesis by dissociation is of the highest consequence.".

The *Method of Integration or Synthesis* is to be used on similar lines. The systems, requisite in the building up of the patient's personality, should be approached at first in an indirect way. By all forms of impressions, conscious and subconscious, the right and healthy minded direction should be indicated to the patient. Normal regulations of life should be shown in such a way that the patient should think that he himself arrived at them voluntarily. He should see that the right course is the one for him to follow, and that strength, health, and energy are in that direction. He must see clearly for himself that the ways he followed

before were not only erroneous, but resulted in sickness, weakness, physical and mental. He must realize that his old life is not only one of misery to his family, but also to himself, that the fault lies with himself rather than with others. The psychopathic patient must learn that his life is directed on wrong lines, that he has been leading a poor life, mean, short, and brutish; that he must build up a life on new lines,—on higher intellectual and moral levels. This mental up-building, this anabolic process, must be accomplished by all kinds of ways, by enlarging the patient's views of life, his mental horizon through courses of actual studies, and more especially by force of intimate example and companionship. Giving books to the patients may be all right, but it does little good. What is needed is the personal touch, the intimate relationship, the example of a friendly life which the patient may follow of his own free decision.

The next step is to have the patient act out his good resolutions and decisions, and get habituated to them. This will strengthen the new habits of life and adjustments, while it will weaken the old habits of behavior. This can only be effected when the patient is under personal care and guidance. The physician must live with the patient. Nothing will encourage so much the patient to try again as the personal interest he sees the physician takes in his efforts. Afterwards, the patient will learn to do for its own sake what was done for approbation.

Perhaps it may be well that the physician in treating psychopathic diseases should also take into consideration the fact that the patients are characterized by the tendency of formation of habits which are hard to break. The patients are apt to ask that the same thing be done again and again for the simple reason that it has been done several times before. In other words,

psychopathic neurosis is characterized by automatism and routine. This tendency to *recurrence* is characteristic of all forms of primitive life as well as of mental activities which are on the decline,—it is the easiest way to go along. The making of effort is specially abhorrent to the patient, and in fact one may say that he is afraid of change in the same way as the savage is afraid of any novelty or of any change in custom. The tradition is holy, and in a double sense, because it has been handed down by former generations who are regarded as divine and superior, and because the new is strange and, therefore, may prove dangerous and of evil consequence. What has not been tried may prove harmful, pernicious, and even deadly. The old has been tried and approved by generations and the consequences are known, while the new may be in alliance with the evil powers. The same holds true in all cases obsessed by the impulse of self-preservation and the fear instinct. What the patients have tried several times and what has proved good and pleasant is insisted by the patient on being repeated, the new is not known and may be risky, dangerous. I have great difficulty in making changes in the life of advanced psychopathic cases, because of this fear of the new, neophobia. Once the change is made, and the patient becomes adapted to the new way, then the old way is shunned. In short, *neophobia is an essential trait of psychopathic patients.*

The physician must take this trait of neophobia into account, and as the patient begins to improve, he must gradually and slowly wean the patient of this phobia, inherent in the very nature of the malady. The patient must learn to do new things, and not simply follow mechanically a regime, laid out by the physician or by the nurse. *The life must be personal.* The patient should be made to change many of his ways, and above

all he should learn to follow reason rather than habit and routine. Everything, as much as possible, should be reasoned out, he should be able to give a rational account of his habits and actions. Whatever appears to be a matter of routine, irrational and unaccountable habit, simply a matter of recurrence, of repetition of action should be discarded, should be changed to actions and adaptations for which the patient could give a rational account. We must remember that the patient lives in the condition of recurrent mental states, that his mental activity, as I have pointed out, follows the laws of recurrence, characteristic of the type of recurrent moment consciousness. It is, therefore, the physician's object to lift the patient out of this low form of mental activity to the higher types of rational, personal life in which the patient can rise above the perturbations of life, above the pettiness of existence with its worries and fears. This procedure is essential.

We can realize how pernicious those schemes are which physicians and many people in sanitariums lay out for the patients just to keep them busy for the time of their stay under special care. As soon as the patients leave, they are in the same predicament as before. The patients wish to have their lives conducted in the same mechanical, automatic routine. In this way they are really on the same low plane of mental life, on the plane of recurrent moment consciousness, a type which forms the pathological web and woof of the patient's life. Unless the patient is lifted out of this low, mean, and animal form of conscious activity, he cannot be regarded as cured. Instead of having the patient's life saturated and controlled by the recurrent automatisms of the fear instinct, he should learn to be controlled by the light of reason. "A free man is he," says Spinoza "who lives under the guidance of reason, who is not led by fear." Epicurus and the ancient

Epicureans laid special stress on the necessity of getting rid of fear through reason, enlightenment, and education. Thus the great poet Lucretius:

"The whole of life is a struggle in the dark. For even as children are flurried and dread all things in the thick darkness, thus we in the daylight fear things not a whit more to be dreaded than those which children shudder at in the dark and fancy future evils. This terror, therefore, and darkness of mind must be dispelled not by the rays of the sun and glittering shafts of day, but by a knowledge of the aspect and law of nature."

As Carlyle tersely puts it; "The first duty of a man is still that of subduing Fear. We must get rid of Fear; we cannot act at all till then. A man's acts are slavish, not true but specious (we may add psychopathic); his very thoughts are false, he thinks too as a slave and coward, till he have got Fear under feet. . . Now and always, the completeness of his victory over Fear will determine how much of a man he is".

The patient complains of lack of confidence. This is a pathognomonic symptom of psychopathic states. At the same time there is confidence in the symptom complex which is often described by him with microscopic minuteness. The patient has no doubt about that. The patient is in search of someone who can overcome this symptom complex in a way which he specially approves. The patient matches the symptoms against the physician's control. The physician is to be subdued by the authority of the diseased personality, by the ruling symptoms of the patient's life. Either the physician meets with opposition, and after some time, must give up the treatment of the case, or he is victimized by the patient's demands, and must comply with them. In the last case the patient may stick to the physician for some time. In both cases the patient is

not really cured. It is only when the patient's diseased self becomes subdued and falls under the physician's control, it is only then that a cure is really possible.

The first and foremost characteristic of psychopathic states is the narrowing down of the patient's life interests. The patient begins to lose interest in general, abstract problems, then in that of his own profession or occupation, then he loses interest in the welfare of his party or his country, and finally, in his family, wife, and children. Even in the case of lovers the psychopathic patient seeks to utilize the person he loves for his own benefit, namely, his health. He loves the person as a wolf loves a lamb. The self becomes narrowed down to health, the key to his supposed spiritual life. This is clearly seen in the case of Christian scientists. Self-preservation and fear permeate the patient's life.

We notice that the patient's life activity, especially his mental life becomes narrowed down. His attention becomes circumscribed to a few subjects and objects. This is the limitation of the *extent* of attention. There is afterward a limitation of the temporal span of attention. The patient cannot keep his attention on any subject for any length of time. This span of attention becomes more and more limited with the growth and severity of the psychopathic malady. If the patient is educated and has had an interest in various subjects, the latter becomes more and more limited in scope. Finally the patient becomes reduced to the least amount of effort of the attention, and that only for a brief period of time. When the trouble reaches its climax, the patient loses all interest and capacity of reading and of studying. He cannot think, he becomes less and less original in his thought, he becomes even incapable of thinking. The patient's whole mind becomes limited to himself and to the symptoms of his disease.

Along with it the fear instinct grows in power and

inhibits all other activities. There is a limitation of the patient's personal self. The personality becomes reduced to the lowest levels of mere existence and caring for his own selfish pains and small pleasures which are exaggerated and magnified to an extraordinary degree. In other words, the personal life of the patient becomes more and more limited as the pathological process goes on. It becomes harder and harder for the patient to take an active interest in life, to exercise his functions, his life interests as well as his life activities.

It is clear that under such conditions the tendency of the patient is to rest and brood about himself, and keep indulging his limited interest which gets still more limited as the pathological process becomes more extensive and intensive. Under such conditions it is suicidal to indulge the patient and suggest to him a rest cure, a cure which lies along the line of the disease process, thus tending to intensify the symptom complex. What the patient needs is to change his environment, and be put under conditions in which his interests of life can be aroused, his life activities can be stimulated to functioning on the right lines, laid out by physicians who understand the patient's condition.

What we must remember in the treatment of psychopathic patients is the fact that we deal here with the aberrations of the impulse of self-preservation, the most powerful, the most fundamental and the least uncontrollable of animal impulses, and with the fear instinct which is the most primitive of all animal instincts. This morbid state of the impulse of self-preservation must be fully realized by the physician before any treatment is begun. The physician must also see and study closely the line on which the self-preservation impulse is tending, and to comprehend the associations along which

the impulse takes its course in the history of the patient and in the symptom complex.

What the physician must specially look after is the elusive feeling of self-pity which manifests itself under various garbs, and hides itself under all kinds of forms. As long as the patient is introspective and has the emotional side of self-pity present, so long is his condition psychopathic.

The patient's history should be inquired into very closely and while one reviews his history one may get a chance to point out to him indirectly the various psychopathic faults from which he suffers and which must be overcome and corrected. This has to be done by *the method of indirect association or suggestion.* This method is of the utmost importance in the treatment of psychopathic states. *The method of direct association or suggestion* should also be practiced both in waking and trance states, hypnotic and hypnoidal. The physician, however, will find that the method of indirect association or suggestion will have to be employed all through the course of the treatment. All the surroundings of the patient must be of such a character as to continually arouse indirectly thoughts, feelings, and emotions which should neutralize the patient's feelings and emotions, and should control his fears and his abnormally developed impulse of self-preservation. He must learn self-control in the presence of other people, and finally even when other people are away; he must give up self-pity as ludicrous and degrading.

The extreme selfishness and the uniqueness with which the psychopathic patients regard their own condition should be eradicated from their mind. It must be impressed on them that their case is quite common and that there is nothing exceptional about them. It must be made clear to them that the whole trouble is a

matter of mal-adjustment, that they have developed inordinately the impulse of self-preservation and the fear instinct until their mental life has become morbid and twisted. The whole personality has to be readjusted. It is the special tendency of psychopathic patients to regard themselves as unique, privileged above all other patients, they are a kind of geniuses among the afflicted, possibly on account of the special endowments possessed by them, gifts of quite exceptional and mysterious a character. "Have you ever met with a case like mine?" is the stereotyped phrase of the psychopathic patient. As long as the patient entertains that conception of nobility the impulse of self must still be regarded as morbid.

He must be made to understand clearly that there is no aristocracy in disease, and that there is no nobility of the specially elect in the world of morbid affections any more than there is in the domain of physical maladies.

The egocentric character of the psychopathic patient puts him in the position of the savage who takes an animistic, a personal view of the world and of the objects that surround him. The forces are regarded as dealing specially with man and his fate, often conspiring against man. Magic is the remedy by which he tries to defend himself and even to control the inimical or friendly natural forces or objects, animate and inanimate, with which he comes in contact. This same attitude, animistic and personal, of the primitive man is present in the psychopathic patient. The patient is afraid that something fearful may happen to him. Against such accidents he takes measures often of a defensive character which differ but little from the magic of the savage and the barbarian. The whole of nature has the patient as its centre and may crush him. That is why these patients are the victims of all kinds

of fakes, schemes, panaceas of the wildest type, unscrupulous patent medicines, absurd regimes, mental and religious, whose silliness and absurdity are patent to the unprejudiced observer. The mental state of the psychopathic patient is that of the savage with his anthropomorphic view of nature, with his fears based on the impulse of self-preservation. The psychopathic patient is in a state of credulity with its faith in magic.

The emotional side of the impulse of self-preservation and of the fear instinct should always be kept in mind by the physician who undertakes the treatment of psychopathic cases. The physician must remember that the emotions in such cases are essentially of the instinctive type, that they therefore lie beyond the ken of the patient's immediate control and action of the personal will. The physician should not therefore be impatient, but while protecting the invalid against the fears that assail the latter, he should gradually and slowly undermine the violence of the impulse of self-preservation and the anxiety of the fear instinct.*

We have pointed out that under the fear instinct are comprehended all concomitant sensory processes, gland-

*Although I lay stress on the instinctive aspect of the fear emotion, I do not agree with those who lay down the law that all instincts have an emotional side to them, who go even to the extent of claiming that the emotion is the characteristic trait of instinct in general. I cannot agree to such an extreme statement, simply because the facts do not warrant it. There are instincts with no emotions and there are emotions with no instinctive side to them. The instincts of the Crustacea or of the Annelidae are hardly of an emotional character; it is questionable, if the instincts and the biological tropisms of lower life have anything emotional about them, and it is not certain if in the case of Mammalia or even in the case of the human infant just born the instincts present are in any way emotional. The early primitive instincts, ontogentic and phylogenetic, in all likehood lack that emotional character which is probably a characteristic only of the high types of psycho-physiological organization. We may, however, grant that in the case of the psychopathic patient the instincts are charged with emotional energy, since the emotional element is a predominant factor in such neuroses and psychoses. We have shown in our works that the manifestation of such instinctive energy, as subconscious and inhibited, is eruptive in character, giving rise to attacks often of a violent nature.

ular, intestinal, respiratory, and motor reactions to external and internal stimulations, as well as sensory, perceptual, and ideational processes. All these processes enter as elements into the emotions, and especially into that psycho-biological reaction known as the fear instinct. The emotional and instinctive, psycho-physiological processes, may be looked at from a three-fold standpoint, from the afferent, central, and efferent. Some psychologists emphasize the central and others, especially of recent date, are apt to over-emphasize the efferent and afferent aspects of emotion in general and of instinct in particular. As a matter of fact all the three aspects enter indissolubly into emotion and instinct wherever the two are in any way associated. In the treatment of the fear instinct which underlies all psychoneurotic and psychosomatic cases one must bring about the modification of that instinct with its fundamental impulse of self-preservation.

In utilizing the principle of metathesis and modification which we have pointed out in our previous chapters of this work, one must take into consideration the various aspects of the self-impulse and fear instinct, afferent, efferent, and central. All the elements must be affected in order to obtain satisfactory results. Some psychologists claim that the sensory and central elements are unmodifiable, and that only the efferent, motor elements can be modified in the emotions and impulses. This claim is not justifiable by facts. My clinical facts and cases go to show that such a claim is untenable. *All the elements entering into an emotion are modifiable*, and are being modified in the course of ontogenetic development of the individual as well as the phylogenetic evolution of varieties, species, and genera. The sensory elements and mental states, going to make up the afferent states of the emotions, keep on changing, and so do the central elements and states, the qualitative

feeling and ideational aspects into which the afferent and efferent elements enter as constituent components. All that we can possibly claim is that sensory elements are more modifiable than central, and that the motor are more modifiable than the sensory elements. Even this statement is subject to restriction. It is not that the sensory elements and central states are less modifiable than the efferent, motor elements and states, but that the latter are more modifiable, because they are more accessible to external and internal influences.

From the standpoint of the amount of modifiability we may say that the central element and states are even more modifiable than all the other elements, since they form the psycho-physiological products of all the afferent, incoming stimulations, both purely sensory and kinaesthetic processes. In other words, inasmuch as the central elements form the product of the afferent and efferent processes from the sensory incoming stimulations, from the motor processes and glandular reactions, the *the central elements and states may be regarded as being more modifiable than all the other elements.* It is not because motor elements are intrinsically more modifiable than sensory and affective elements, but because movements are directly accessible to our control than are peripheral sensory, central, and emotional processes in general. It is not that the afferent and central emotional elements are not modifiable *per se*, as some would have it, but because the efferent or motor elements are easier to modify. I quote from a work of mine written by me some fifteen years ago. Since the generalization is of import, both from a theoretical and practical therapeutic as well as an educational standpoint, and since some have misapprehended it by overstatement, I take the liberty of quoting at some length:

"Ideo-motor life is more subject to changes from

slight stimulations than sensory life: *motor elements enter readily into new combinations.* From a biological standpoint one can see the importance of the greater ease of modifiability displayed by sensori-motor elements, since in the adaptation of the organism to its environment it is these elements that are mainly employed in reaction to stimuli of the external world. From the standpoint of adaptation, a slightly appreciable difference of sensory experience may give a widely different and highly complex motor reaction.

"Psychomotor processes form the most important and largest portion of mental life. With the exception of man, all the representatives of the animal kingdom, from the lowest to the highest forms, represent but different stages in the evolution of sensori-motor life. The great majority of mankind still leads a life closely allied to animal sensori-motor states. Even in the highest and most developed forms of mental activity, motor ideas and representations are by far the most predominant. Without motor elements, ideational life is arrested. It is these sensori-motor and ideo-motor elements that constitute the 'stream, the flow, the current' of our thoughts. Motor elements enter freely into combinations with all other elements of mental life. This freedom in forming new combinations and associations makes the suggestion of motor ideas and representations highly effective.

"Throughout the scale of animal life from the lowest to the highest forms, intelligence is intimately related to the degree of development of the musuclar system and the delicacy of its motor adjustment. Among the lower forms of life, the Cephalopods are well equipped with powerful muscular arms capable of executing a great variety of vigorous movements. Now the Cephalopods also possess a more highly developed nervous system with a higher grade of mental functions than

the rest of the Mollusca. The great activity of ants and bees is notorious and their instinctive psychic life is the richest among the Arthropoda. Note the great variety of motor adjustments of the beaver and also the intelligence that goes along with it. Birds possessed of a high degree of activity and motor adaptability are also the most intelligent of their kind, such for instance as the crow and the different species of talking birds. Notice the activity and great agility of the fox and also the unusual cunning for which he is so celebrated. The suppleness of the dog, his quick reactions to stimulations, the resources of his motor adjustments, and the great extent of his modifiability under changing conditions, are all well known, and along with them goes a high degree of psychosis. Of all the Mammals, the Quadrumana are the most active, the most imitative and full of mimicry, and with the exception of man they are also the most intelligent. When we come to man we cannot help admiring the high complexity and extreme delicacy of his motor adjustments. Most marvellous, however, is the human hand, that divine organ which gives shape and form to works of art, to all the outward, visible manifestations of civilization. The great artists and thinkers of antiquity held the human hand in great reverence. One of the great Greek philosophers did not even hesitate to declare that man's superiority over the brute was due to his hand. Finally, in the wonderfully delicate motor adjustments of speech we find clearly illustrated the intimate relation between motor and psychic activities.

"Experiments prove the same truth of the predominance of motor ideas and representations in our mental life. If a series of syllables or numbers is given to memorize after one reading, five out of ten can be remembered, though with some difficulty; but if the syllables or numbers are written down at the same

time, though not looked at during the writing, a far greater percentage, such as six or seven syllables, can be remembered. If the motor elements in a train of ideas are suppressed, the order of the series becomes confused, and even destroyed, showing that the motor ideas are important links in trains of association of ideas.

"Biologically regarded, voluntary activity—will is the organism's power of adjustment to the conditions of the external environment. In its last psychological analysis, voluntary activity, or will, consists of representations of various modes of adaptations—that is, of motor memories, of highly complex systems of kinaesthetic representations, constituting the active subject of the highly developed personality. If this be realized, then the vital importance of motor memories cannot be too highly overrated. Motor memories are at the very heart of personality. We *are* what we *can accomplish.* Extreme variability and adaptability are the main characteristic traits of intelligence, will, personality, with their motor memories as their central nuclei.

"The readiness of psychomotor elements and groups to enter into ever new combinations gives rise to the formation of a great wealth of associations which help to make the labile psychomotor groups and systems stable and easy of recall. In fact it may be said that *the ease of recall is proportionate to the mass of associated kinaesthetic memories.* If under the action of adverse conditions associations are dropped or lost, many more still remain to recall the affected system, some of the functional bonds of which have become loosened. The great wealth of associations formed by motor memories brings about their ease of recall, also their recurrence in consciousness even under unfavorable conditions of dissociation. The great modifiability and variability

of systems of motor memories requisite in the adaptation of the organism to the varying condition of its environment make the ever greater instability of motor memories an imperative necessity in the struggle for existence. Forming the predominant elements, both as to intensity and mass, of the most complex, relatively stable, though ceaselessly shifting groups and systems constituting the highly developed organization of the personal self, *the motor elements, presentative and representative, are also the first to become involved in the process of dissociation.* In the various forms of nervous and mental diseases, under different conditions of intoxication and auto-intoxication, in the traumas caused by shock, physical or psychic, the delicate movements of adjustments are the first to become affected, dissociations of systems of motor representations are first to occur with their concomitant motor derangements.

"The instability of motor memories and of psychomotor elements in general may be brought into relation with the fact of the early affection of muscular and kinaesthetic sensibilities, and with the predominance of sensori-motor over purely sensory symptoms so frequently occurring in the course of nervous diseases. With this may be correlated the significant fact referred to by Mosso, that 'all substances which slowly destroy the organism must produce phenomena analogous to those of curari, since the motor nerves, according to our researches, have less vitality than the sensory.' It would be more correct to substitute for 'motor' the term 'sensori-motor,' because muscular and kinaesthetic sensibilities are also involved in the same process of degeneration. It may also be observed in passing, that cellular kinoplasm with the 'kinocentrum,' the centrosome and its archoplasmic structures, possibly the most primitive motor organoids of the cell, similarly manifest a high degree of variability and instability.

"Motor memories may be regarded as the labile elements of consciousness; they become easily and frequently dissociated and dropped into the subconscious, but for that very reason they are also very easily reproduced or regenerated. In this respect motor memories follow the general biological law of organic regeneration: *Organs that are easily and frequently lost in the struggle for existence are also easily regenerated, as for instance, the legs and claws of Crustacea or the tentacles of the starfish and octopus.*. Dissociated systems of motor memories often become regenerated and under pathological conditions when synthesis is impossible they may even recur with great insistence, giving rise to the most uncontrollable types of insistent ideas and impulses and to various forms of so-called "psychic epilepsy,' especially of the motor type, closely mimicking typical, organic epilepsy. Dissociated, subconscious systems, like rudimentary aborted organs, are very persistent and often very injurious to the organism. The recurrence of the subconsciously submerged dissociated systems has its parallel in the biological phenomena of reversion, or atavism. The development, growth, and recurrent persistence of a subconscious dissociated system is like a malignant sarcomatous neoplasm the cells of which present a reversion to the embryonic type. . . .

"This fact, that the psychomotor elements, motor ideas and representations, enter more easily into combinations and form extensive associative systems, makes them easier of recall, and hence apparently more persistent in memory. From an educational standpoint, one realizes the importance of this fact of persistent recurrence and great ease of recall of motor memories. Children learn and remember things best, not by abstract notions, not by looking at objects and hearing of things, but by acting out whatever is taught

them. Not only is the interest increased on that account and knowledge made more vital and better assimilated, but the content acquired is also far better retained and more easily remembered; it emerges with greater ease and is at the child's command at any time, because of the nature of the interwoven motor memories. In the training of the mentally defective, the best method followed is that of motor instruction; the best way of teaching the mentally defective is to have the ideas acted out and from the actions get at the meaning, even if it be only automatically, of what is requisite to be learned. As a matter of fact, even the perfectly normal and well balanced mind gets at the meaning of things by handling them, by having the attributes of the object and the processes of the work to be learned acted out. *Acting forms the greater part of man's life.* . . .

"For therapeutic purposes it is certainly of importance to have the suggestion (influence, modification) as stable as possible. To effect this, the best way is to utilize this fact of persistence of sensori-motor and ideo-motor elements, of the greater ease of recall characteristic of kinaesthetic sensations and ideas. . . *Motor and kinaesthetic sensations and memories make suggestions durable.*

"It is, of course, preferable that the associated motor memories should not be of a passive, but of an active character. To guide and move the patient's limb, for instance, is not as good as when he carries out the acts of his own accord. In other words, active kinaesthetic associations are most potent. Along with other methods, *use of kinaesthetic associations is of the greatest value in the process of formation and also of disintegration of a stably organized system.*"

This comes down to the practical principle of influencing the patient's personality through an actual

change of his mode of life. The tendency in the treatment is to make the patient work on right lines, not to have him work at his regular occupation, or to lay out for him some artificial trade, as it is done in some places, the patient being made to do definite tasks at certain specified times and in a definite, automatic way. Nothing can be more calculated to keep up the psychopathic condition of recurrent, mental life. The patient should be in the open air, he should be active, but *his activity should be voluntary, spontaneous.* The activity should not only strengthen him, it should help his mental condition, disintegrating the systems of fixed ideas and recurrent mental states. In some cases where the mind was paralyzed by the mental state or when his mental processes were so warped as to make the patient think in one direction, the thoughts should be directed on normal lines. The patient should be made interested in various mental processes and logical activities, in studies and in all kinds of subjects in which the intelligence becomes strengthened and the mind can think on sound lines, while at the same time getting information that gradually helps indirectly to disintegrate the pathological mental systems.

Sometimes it is well to set the patient to do exhausting work so as to counteract the exhausting overactivity of the fear instinct and worry. In some cases I have achieved marvellous results when I suddenly switched patients from the so-called Weir-Mitchell treatment and other medical forms of treatment to a life full of activity and labor in the open, no plays and no games, but *real labor of the severest type.* These were cases who have complained of cardiac affections, counted their pulse, and fainted away at the least provocation. I was with them all the time, took an active interest in their labors and their progress,

and utilized every opportunity to overcome their fear and psychopathic worries.

We must, however, be careful and watch the patient closely, lest he overdoes and becomes so overfatigued as to be incapable of any work. In such cases the fear instinct returns with redoubled fury. It is then hard for the physician to control the course of the disease. The patient loses courage, may lose trust in the physician and all confidence in himself. The physician should have a personal, close watch over the patient's work and not let it to the mercies of a nurse or an attendant. The patient should be in touch with the physician most of the time. In case of any set-back the physician should be on the spot to remedy the mischief. Not until the patient gains more or less confidence in himself is it wise to leave him to himself. This is one of the reasons why it is so hard, if not hopeless, to treat psychopathic patients in the office. The physician gives them the treatment and does not see them until the rest of the day, and sometimes not before several days later. Meanwhile, the patient falls a victim to his own fixed ideas and fear as well as to the influences, coming from all kinds of extraneous sources. Above all, it is impossible to regulate his life and see that the directions are carried out, that no evil influence get hold of the patient when he is at his lowest and needs the help of a strong hand. *Unremittent vigilance is the price of the cure.*

Among psychopathic patients may be found some who are really overworked, and who, in addition to their psychopathic state, actually suffer from overfatigue. In such cases one has to be careful not to set them hard tasks and bring about a still worse condition of fatigue. Such patients need rest, though not the Weir-Mitchell's rest or the rest and seclusion advocated by Dejerine and other French neurologis ts

The seclusion method is not only detrimental to the patients, but it is also a matter of extreme cruelty, it savors of the prison and solitary confinement. The seclusion treatment should by all means be avoided in psychopathic cases.

Active employment has been of late overworked. Many people who are not medical and know nothing of the complexity of psychopathic cases have undertaken the treatment of psychopathic patients by means of athletic exercises and other rough games. Nothing is further from the actual needs of such patients. In many cases such treatment is doing positive harm. It is, therefore, to be greatly regretted that even the medical man seems to be under this delusion of athletics as a remedy, and sends patients to such establishments where incalculable mischief is done. In some cases the patient comes to such places of his own accord, having heard that many others are sent there by reputable physicians, or because some notorious men have visited the place and have given it a good advertisement. There are cases that suffer from some cardiac trouble; such rough treatment is apt to cause damage often of a dangerous character. Even in cases where the physician examines the patient for cardiac affection before the patient goes to such athletic places, there is still the danger of overworking the patient who should be handled with care and given enough to do without drawing on his exhausted store of energy.

There are psychopathic patients who suffer from cerebral fatigue. In such cases we need to give just enough work and occupation for the over-coming of the neurosis, and for the normal functioning of the body and mind. We must, however, be careful not to overwork such patients. I have seen many a patient who came to me under treatment after he had gone through a strenuous athletic or occupational treatment. I have

found such patients in deplorable condition. We must remember that cerebral fatigue may often be associated with psychoneurosis or with psychosomatic disturbances. When cerebral fatigue is present, we must be extremely careful with our regime of physical activities, exercises, and occupations. Without appealing to clinical experience and psycho-therapeutic practice experimental physiology warns us against such a course of reckless and inconsiderate treatment. I quote from Mosso on the subject:

"Cerebral fatigue diminishes the force of the muscles, and with the ergograph we measure this phenomenon with exactitude. The need of rest after intense brain work arises then from the fact that the nervous centers are exhausted and the muscles weakened. The feeling of discomfort and the prostration which characterize intellectual fatigue are due to the fact that the brain, which is already exhausted, has to send stronger stimuli to the muscles in order to make them contract. The exhaustion is twofold: central and peripheral. This explains why after brain fatigue one feels one's energy exhausted by the slightest movement, and why every obstacle which we have to overcome seems to have grown more serious. In these circumstances violent exercises should be avoided, because they are injurious: fencing, gymnastics, or any muscular effort whatever aggravates the conditions of the organism.

"It is, therefore, a physiological error to interrupt lessons to make children do gymnastics in the hope that this may diminish brain fatigue. To restore the forces of the organism when exhausted by intellectual labor there is no remedy other than immobility and letting one's thoughts wander. When we force the nervous system to muscular after cerebral effort, we find the muscles less fit for work; and we add to the cerebral fatigue another fatigue which, as we shall see

later, is of the same nature and is equally harmful to the nervous system. The best way to rest is to sit still and 'think of nothing,' and to let children play about and amuse themselves in the open air."

In the case of psychopathic patients it is not desirable that they should sit still all the time, any more than it is desirable that children in school should all the time sit still. *It is requisite that periods of activity should alternate with periods of repose.* There are cases where I have to graduate the periods of work and regulate carefully the periods of repose. Each case, of course, should be treated individually on its own merits. Cases complicated with fear fatigue must be handled with care, and special conditions should be arranged for periods of work.

For this purpose of inducing repose hypnoidization, or the induction of the hypnoidal state, is specially calculated to help in the treatment of psychopathic maladies. From a psychognostic standpoint the hypnoidal state is of great value, and it is of no less value from a psychotherapeutic standpoint.

CHAPTER XVIII

THE METHOD OF HYPNOIDIZATION

MANY years ago I discovered a special normal, mental state, widely different from the hypnotic state. I termed the state *hypnoidal* and the method of its induction I termed *hypnoidization*. The hypnoidal state is of the utmost consequence in the study, psychognosis, and treatment of functional, psychopathic maladies. I wish to attract the attention of the medical profession in general and of the student of Psychopathology in particular to this method, which is not only of theoretical significance in psychognosis of the cases, but is also of practical, therapeutic value.

The term hypnoidal and hypnoidization are rather misleading and awkward as they are apt to convey the meaning of something hypnotic or hypnoid, and so on. We must warn the student beforehand against such confusion with any hypnosis, light or otherwise. The hypnoidal state is a state *sui generis* and is widely different from hypnosis. The hypnoidal state, according to my researches on various representatives of animal life, is essentially a sleep state. Subwaking and twilight state are more appropriate terms and indicate more accurately the real nature of the hypnoidal state. *Hypnosis is an abnormal condition while the subwaking, twilight hypnoidal state belongs to the normal sleep states.* In fact, according to my work, sleep is a late development in the course of evolution. *Sleep developed out of the hypnoidal state.* The hypnoidal state is the primordial sleep of all the lower representatives of animal life. The hypnoidal state is really the funda-

mental sleep state, and may be regarded as more normal than physiological sleep states. We should not confuse the hypnoidal state with light hypnosis since the two are totally and fundamentally different in character and in nature. Light hypnosis is no more hypnoidal than syncope and coma of apoplexy and concussion are like normal physiological sleep. The hypnoidal state is essentially a primitive sleep state, a state of rest, repose, and relaxation.

There is nothing rigid about the method of hypnoidization. The method is quite elastic and adaptable to each person, it admits of an almost infinite variety of modification. The principal object is to observe the conditions requisite for the induction of normal and abnormal suggestibility. The conditions of normal suggestibility should be specially observed.

I quote the tables of normal and abnormal suggestibility as well as the few laws formulated by me in my work "*The Psychology of Suggestion*":

Normal Suggestibility.	Abnormal Suggestibility.
1. Fixation of attention.	1. Fixation of attention.
2. Distraction.	2. ———
3. Monotony.	3. Monotony.
4. Limitation of voluntary movements.	4. Limitation of voluntary movements.
5. Limitation of the field of consciousness.	5. Limitation of the field of consciousness.
6. Inhibition.	6. Inhibition.
7. Immediate execution of the suggestion.	7. ———

In the same work I come to the conclusion, as the result of investigation, that "the nature of abnormal suggestibility is a disaggregation of consciousness, a slit, a scar, produced in the mind that may extend wider and deeper, ending at last in a total disjunction of the waking, guiding, controlling consciousness from the

reflex consciousness. . . . Normal suggestibility is of like nature,—it is a cleft in the mind, only here the cleft is not so deep, not so lasting, as it is in hypnosis or in the state of abnormal suggestibility; the split is here but momentary, evanescent, fleeting, disappearing at the very moment of its appearance."

We have also shown that the laws of normal and abnormal suggestibility may be stated as follows:

"*Normal suggestibility varies as indirect suggestion and inversely as direct suggestion.*

"*Abnormal suggestibility varies as direct suggestion and inversely as indirect suggestion.*"

The general law of suggestibility is:

"*Suggestibility varies as the amount of disaggregation, and inversely as the unification of consciousness.*"

It is on those general laws and the nature of relation of the personal consciousness to the subconscious that I have based my method of hypnoidization. In order to reach the dissociated mental states we have to lay bare the subconscious, and this can be effected by the conditions requisite for the induction of normal or abnormal suggestibility, conditions which bring about a disaggregation of consciousness. In cases, therefore, where hypnosis is not practicable and the subconscious has to be reached, we can effect a disaggregation of consciousness and thus produce an allied subconscious state by putting the patient under the conditions of normal suggestibility: fixation of attention, distraction, monotony, limitation of the voluntary movements, limitation of the field of vision, inhibition, and immediate execution.

This is precisely what the method of hypnoidization consists in: "The patient is asked to close his eyes and keep as quiet as possible, without, however, making any special effort to put himself in such a state. He is then asked to attend to some

stimulus such as reading or singing (or to the monotonous beats of a metronome). When the reading is over, the patient, with his eyes shut, is asked to repeat it and tell what comes into his mind during the reading, or during the repetition, or immediately after it. Sometimes the patient is simply asked to tell the nature of ideas and images that have entered his mind." This should be carried out in a quiet place, and the room, if possible, should be darkened so as not to disturb the patient and bring him out of the state in which he has been put.

Fatigue, physical and mental, especially emotional, is a favorable condition. A prolonged warm bath with relaxation is favorable. A predisposition to sleep is helpful. It is, therefore, best to make the first attempts at hypnoidization late at night, when the patient is both tired and sleepy. In most cases, darkness, quietness, repose, the monotonous buzzing of an inductorium are conditions favorable to the induction of the hypnoidal state.

As modifications of the same method, the patient is asked to fixate his attention on some object while at the same time listening to the beats of a metronome; the patient's eyes are then closed; he is to keep quiet, while the metronome or some other monotonous stimulus is kept on going. After some time, when his respirations and pulse are found somewhat lowered, and he declares that he thinks of nothing in particular, he is asked to concentrate his attention on a subject closely relating to the symptoms of the malady or to the submerged, subconscious states.

The patient, again, may be asked to keep quiet, to move or change position as little as possible, and is then required to look steadily into a glass of water on a white background, with a light shining through the contents of the glass; a mechanism producing monotonous sounds

is set going, and after a time, when the patient is observed to have become unusually quiet, he is asked to tell what he thinks in regard to a subject relating to his symptoms. He may be asked to write the stray ideas down, if speaking aloud disturbs the induced states favorable to the emergence of the dissociated mental states.

In some cases it is sufficient to put the patient in a quiet condition; have his eyes shut and command him to think hard of the particular dissociated states.

Once the hypnoidal state is induced by any of the various methods of hypnoidization, we can either attempt to follow up the history and the development of the malady, or we may chiefly work for the therapeutic effect and treat the present symptoms. It is, however, advisable from a purely practical therapeutic purpose to combine the two procedures, the cure is then effective and far more stable. When the history of the origin and development of the disease can not be traced, on account of the age or unintelligence of the patient, the therapeutic effects alone of the hypnoidal states have been utilized. The results are not as satisfactory as far as scientific information is concerned, but they are of great benefit to the patient.

The getting access to subconscious experiences, lost to the patient's personal consciousness makes the hypnoidal state a valuable instrument in the tracing of the origin and development of the symptoms of the psychopathic malady.

From a practical standpoint, however, the therapeutic value of the hypnoidal state is most important. Our experiments have revealed to us the significant fact that the hypnoidal state is the primordial rest-state; sleep is but a derivative form of rest. In many conditions of disease it is advisable to have the patient revert to a simple and primitive mode of life.

Similarly, *in psychopathic diseases a reversion to a simple primitive state proves to be of material help to the patient.* In plunging the patient into the hypnoidal state, we have him revert to a primitive rest-state with its consequent beneficial results. The suggestibility of the state, if skillfully handled, is apt to increase the therapeutic efficacy. Relaxation of nervous strain, rest from worry, abatement of emotional excitement, are known to be of great help in the treatment of nervous troubles of the neurasthenic or of the so-called "psychoasthenic" variety. That is what we precisely observe in the treatment of psychopathic diseases by means of the agency of the hypnoidal state, the efficacy of which is all the greater on account of the presence of the important trait of suggestibility.

The most important fact, however, is *the access gained through the hypnoidal state to the patient's stores of subconscious reserve neuron energy, thus helping to bring about an association of disintegrated, dissociated mental systems.*

Dr. John Donley in his article "The Clinical Use of Hypnoidization" published in The Journal of Abnormal Psychology for August-September, 1908, gives the following account of the method of hypnoidization and of the hypnoidal state:

"The treatment of that large group of disorders commonly classed as the psycho-neuroses is sufficiently arduous to warrant the assumption of a receptive mood toward any measure that may increase our efficiency. . . . Such assistance, it would seem, is open to us in the hypnoidization of Dr. Boris Sidis.

"Hypnoidization has two things to recommend it, facility of induction and successful results. The technique is simple, there need be no mention of hypnosis, and hence no stirring up of apprehension in the mind of even the most timorous patient; while the

effects produced are comparable, in many respects at least, with those brought about through the medium of complete hypnosis. It is not, and perhaps cannot be maintained that in hypnoidization we possess a complete substitute for hypnosis; but so far as a limited experience (some thirty cases) allows of our drawing any conclusions we feel that hypnoidization is quite worthy of more attention and study than it has hitherto received.

" . . . Many variations of this particular procedure are of course possible, and the one which the writer has found quite generally useful is the following: The patient is first placed at ease by a few minutes' conversation, during which he is instructed regarding what is about to be done. He is then requested to lie upon the couch, the head of which has been placed close to a faradic wall plate. With his eyes closed he is directed to listen to the monotonous vibration of the ribbon rheotome, and to concentrate attention either upon nothing at all or upon the particular idea or group of ideas or images suggested to him by the physician. At the beginning of the experiment the patient may be somewhat tense and ill at ease, but a few minutes suffice to render him relaxed and to place him in the mental state to which Sidis has given the name 'hypnoidal.' It is during the continuance of this state that one may obtain information valuable for diagnosis, and give suggestions useful for therapeusis.

". . . During a psychotherapeutic conversation one will often notice a certain attitude of criticism and resistance upon the part of a patient, whereas if the same patient be placed in the hypnoidal state, there is voluntary conversation with the physician, yet a greater readiness to give credence to his remarks. For the purpose of psychotherapy it is often useful to place the patient in a condition of hypnoidization during

which a greater influence may possibly be exerted upon subconscious mental processes. There is then a more direct avenue of approach to those subconscious factors that are so potent in determining and influencing self-conscious attitudes; for it has seemed to me that the physical and mental relaxation that characterize the hypnoidal state are precisely the conditions requisite for imprinting ideas upon the minds of neurotic patients. Whether and how far this is true will be determined by a wider experience with different types of patients. Some have been particularly receptive in hypnoidization, which they were not in the waking state; others have been very much less so.

"The beneficial effects of hypnoidization are to be seen not alone in those cases where submerged, forgotten memories and emotions are operative in the production of mental disaggregation, but also in those numerous instances where the experience causing the obsessive idea or emotion is well known to the upper consciousness.

". . . The mechanism at work during hypnoidization may be assumed to be that of mental synthesis into the self-conscious personality of the individual. With the production of this synthesis and as a consequence of it there is a change of emotional tone. This, I believe, is the most important factor in the case. A mental system which remains automatic and extra-voluntary carries with it a disturbing emotional reaction. In cases I and II for example the recurrence of the obsessive state was not only accompanied, but preceded and followed by a most pronounced emotion of fear, with all of its psychological manifestations. As a result of this the patients were kept in a state of more or less constant psychological disintegration. They were unable to master their emotions.

"In hypnoidal states they were made to reproduce

their obsessive thoughts and images and then to describe them in words. When this had been accomplished and they had received further assurance and persuasion from the experimenter, although the purely intellectual content of their obsessions remained known to them, the insistent automatic character and disturbing emotional factors had disappeared. In this metamorphosis of emotional reaction we may observe one of the most interesting and useful attributes of the hypnoidal state."

Dr. Donley gives then a series of cases which he treated successfully from psychognostic and psychotherapeutic standpoints. The reader is referred to the original article.

I may also refer to Dr. Mitchell's presidential address before the English Psycho-Medical Society on January 26, 1911, on "*The Hypnoidal State of Sidis*," published in the Transaction of the Psycho-Medical Society, and republished in my "*Symptomatology*." "The value of hypnoidization," says Dr. Mitchell, "in the resurrection of dissociated memories is that which is perhaps best established. And this applies not only to the restoration of the forgotten experiences of ordinary amnesia, but to the recovery of dissociated memories that are of pathogenic significance. . . Sidis himself has insistently taught that the reassociation of dissociated complexes effects a cure of psychopathic disease. . . My own experience, so far as it goes tends to corroborate in every respect the claims put forward by Sidis. . ."

While in the hypnoidal state the patient hovers between the conscious and the subconscious, somewhat in the same way as in the half-drowsy condition one hovers between wakefulness and sleep. The patient keeps on fluctuating from moment to moment, now falling more deeply into a subconscious condition in

which outlived experiences are easily aroused, and again rising to the level of the waking state. Experiences long submerged and forgotten rise to the full light of consciousness. They come in bits, in chips, in fragments, which may gradually coalesce and form a connected series of interrelated systems of experiences apparently long dead and buried. The resurrected experiences then stand out clear and distinct in the patient's mind. The recognition is fresh, vivid, and instinct with life, as if the experiences have occurred the day before.

It cannot be insisted too much that the hypnoidal state is not a light hypnosis. *The hypnoidal state is a sleep state.* The hypnoidal state is the anabolic state of repose characteristic of primitive life.

The hypnoidal state is an intermediary state between waking and sleep. Subwaking is an appropriate descriptive term of the character of the hypnoidal state. The subwaking hypnoidal state, like sleep and hypnosis, may be of various depth and duration; it may range from the fully waking consciousness and again may closely approach and even merge into sleep or hypnosis. The same patient may at various times reach different levels, and hence subconscious experiences which are inaccessible at one time may become revealed at some subsequent time, when the patient happens to go into a deeper hypnoidal state.

On account of the instability of the hypnoidal state, and because of the continuous fluctuation and variation of its depth, the subconscious dissociated experiences come up in bits and scraps, and often may lack the sense of familiarity and recognition. The patient often loses the train of subconscious associations; there is a constant struggle to maintain this highly unstable hypnoidal state, and one has again and again to return to the same subconscious train started

into activity for a brief interval of time. One must pick his way among streams of disturbing associations before the dissociated subconscious experiences can be synthesized into a whole, reproducing representatively the original experience that has given rise to the whole train of symptoms.

The hypnoidal state may sometimes reproduce the original experience which, at first struggling up in a broken, distorted form and finally becoming synthesized, gives rise to a full attack. The symptoms of the malady turn out to be portions, bits, and chips of past experiences which have become dissociated, giving rise to a disaggregated subconsciousness. The method of hypnoidization and the hypnoidal states induced by it enable us to trace the history and etiology of the symptoms, and also to effect a synthesis and a cure.

For many years my investigations of the hypnoidal state were carried out on subjects and patients, adults and children. The work was entirely limited to the study of such states as found in man. Having found that during the hypnoidal state the condition of mental plasticity is quite pronounced for therapeutic purposes, and having effected many cures of severe psychopathic maladies, ranging throughout the whole domain of so-called hysterical affections, neurasthenia, obsessions, drug habits, especially alcoholic ones, the hypnoidal state has become, in my practice, quite an important therapeutic agent. Lately, others have obtained excellent results with the hypnoidal state in their treatment of various functional, psychopathic maladies.

The theraupeutic employment of the hypnoidal state may be accomplished in a physiological mode or in a purely psychological way. The hypnoidal state may be utilized for the induction of an intermediate sleep state of repose, in accord with its proper function in the

early history of animal life when rest was requisite for repair of organ and function. The psychological mode is the utilization of the hypnoidal state for the direct and indirect mental modification of the psychopathic mental systems. The alternation of the two forms of hypnoidal treatment is sometimes advisable. In a number of cases the repose hypnoidal treatment, if supplemented by other methods, is quite effective.

I have pointed out that the conditions of abnormal suggestibility are: (1) Fixation of attention; (2) monotony; (3) limitation of voluntary movements; (4) limitation of the field of consciousness; (5) inhibition.

Patients, therefore, who are so situated as not to comply with the conditions of abnormal suggestibility are difficult to hypnotize. Patients whose attention is weak, fluctuating and wandering, who cannot sustain any interest in a subject without changing it immediately; patients with diffused attention, such as idiots, imbeciles, are not favorable subjects for hypnotization. On the other hand, patients whose personal attention is fixed on systematized delusions, fixed ideas, imperative concepts or on any other well-organized system of ideas permeated by a strong emotion, patients who are intensely conscious of their troubles and pay minute attention to the slightest symptoms so that their attention is confined to a narrow, limited region, their ideas and concepts are fixed, their mental and emotional activities run in well-defined grooves which resist efforts at variations,—such patients are hard to put into a hypnotic state. The whole mental make-up has, in such patients, not only lost its plasticity, but is militantly aggressive, so to say, against all changes, the dominant mental systems having gained undue control over the personal consciousness of the individual. The attention is already bound in one definite direction, in the direction of the pre-

dominant systems which admit of no inhibition. Thus free fixation of attention and voluntary inhibition, the two important conditions requisite for abnormal suggestibility, are here at a disadvantage or completely absent.

Patients with a shifting attention, as well as patients with a more or less rigidly fixed attention, are usually poor hypnotic subjects and are specially benefited by the hypnoidal state. Patients with insistent moods of a depressing character, with a fixed tendency to worry, to inspect the minutiæ of feelings, hovering in the background of consciousness; patients who take delight in self-analysis, in watching their symptoms, who never can dilate enough on the various delicate shades of their feelings and experiences; patients whose focal consciousness seems always to hover with a feeling of luxury on the periphery of mental life,—such patients are often the despair of the physician who should avail himself of the hypnoidal state, specially adapted for such cases. The hypnoidal state may not be striking and sensational in its manifestations, but it is a powerful instrument in Psychopathology and Psychotherapeutics.

CHAPTER XIX

CLINICAL CASES OF HYPNOIDAL TREATMENT

I.

MR. M. G. Irish. Age thirty-eight. Married. Occupation, liquor dealer. Father, living, well. Mother died of pneumonia when at the age of forty. Brother and sister died of some obscure form of "heart trouble." Physical condition is good. Patient has no appetite, worries, has no confidence in himself, is full of indecision and fear of anything "new;" he is extremely methodical, things must be arranged in a certain order, otherwise he feels uneasy and quite unhappy. Has no headaches, suffers from insomnia. Does not drink, but smokes excessively. Sexual life normal. Has been sensitive and nervous from his very childhood. He broods much over his incapacity of spelling. Has been lately working very hard on a new business intrusted to his care. He doubts his business capacities, and fears to ruin the business. He became greatly depressed, had to give up his work and go to the country, but with no beneficial results.

The patient was brought to me in a state of deep despondency, close on the brink of suicide. He could not be hypnotized. I put him into a slight hypnoidal state, and kept him in a state of relaxation for fifteen minutes to half an hour. When he came out of it he felt "a little better, but not much." After two weeks' treatment the patient felt so far improved that I advised him to return to his work while his treatment was being continued. Gradually his despondency gave way; his fears, worries, and doubts disappeared, while confidence in himself became strengthened. Patient

declared he felt well,—"never felt so well" before. The treatment covered a period of three months. It is now more than seven years since the completion of the cure, the patient continues to stay well and carries on his business with far more energy than before.

II. Miss P. R. Age twenty-three. American. Mother is nervous, "hysterical." Sister high strung. Patient was "sensitive" when young, but was well otherwise. Her present trouble began some three years ago. She suffers from constipation, nausea vomiting, dizziness, dysmenorrhea. Eyes ache occasionally and are relieved by glasses. Suffers from numbness in extremities and great fatigue. Attention is good, but her mental state is one of indecision and fear.

At first the hypnoidal state was brief in duration, the patient being restless, but as I persisted, the hypnoidal state became prolonged, with gradually increasing beneficial effects.

III. B. P. Seventeen years of age. Family history is good. Up to the age of twelve was well. After that he changed in character, became irascible, deceptive in his dealings with people, careless in his social relations, contradicted and even abused occasionally his relatives and treated his mother with disrespect. All power of concentration of attention seemed to have gone,—at least he claimed so. "My head begins to whirl and my eyes darken when I get hold of a book and try to think long." The boy probably exaggerated his condition, but he was tested in various ways by different physicians and educators, and his attention was found to be wandering. The boy was otherwise quite intelligent. He became associated with idle boys, learned to smoke and acquired other bad habits. About the age of fourteen, he met with an accident from a cannon

cracker, which knocked him down unconscious and nearly destroyed his eyesight.

The treatment of the case is quite complicated and would take too much space to elucidate it here. I can only say that the hypnoidal state has been utilized in this case with great advantage. Besides the therapeutic power of the hypnoidal state, the subconscious reserve nervous energy comes into play, while many of the other psychotherapeutic methods become enhanced in their efficiency when utilized in the subwaking hypnoidal condition.

IV. Mrs. F. T. Age twenty-seven. American. Family history good. Patient is emaciated, pale and anemic; pulse is irregular; there is accentuation of second aortic; otherwise heart is in good condition. Menstruation is normal, occasionally painful and scanty. She was well when a child, but was delicate and frail. She studied hard in one of the local academies and got a fair education. In the provincial town where she lived things were quiet, and patient's life was rather uneventful up to the time of her marriage, about the age of twenty-two. She was then suddenly transferred from a quiet environment right into the turmoil and whirl of life. The young couple had a hard struggle for the bare necessities of life; at the same time the family responsibilities and social duties were heavy, exacting, and distasteful. This told on the patient and she began to brood, became gloomy, depressed, lost her appetite, began to suffer from restless sleep accompanied with bad dreams and nightmares; complained of anorexia, indigestion, nausea, retching, headaches, and dysmenorrhea. Darkness began to gather around her and she began to feel, as if she were hemmed in by dark shadows which haunted her day and night. Her dreams were full of the same "indefinable shadows which have gotten a grip on her

life and sucked out the essence of her soul." She used to wake with those shadows, crowding on her from all sides. The patient, in short, was obsessed by a fear of shadows. She was tired at the least exertion, could not concentrate her mind, had no self-control, no will-power to decide anything, life was a burden.

Patient was treated by hypnoidization. The physical and mental conditions began to improve rapidly. All the gloom and shadows fled. The fatigue, the head-aches, the digestive and menstrual disturbances were gone, and at the end of four months she recovered her health and cheerfulness, and gained twenty-three pounds in weight. It is now more than ten years since the treatment is completed; patient continues in excellent condition.

V. Miss E. F. Age twenty-five. American of Irish descent. Family history is good. Physical condition is good; menstruation normal. She was well up to the age of seventeen, when during the winter she had a severe attack of the grippe. She suffered from insomnia. It happened that a lady, a neighbor of theirs, became insane. The idea then came to the patient's mind that she too might become insane. Filthy words enter her mind, and she feels as if she "is getting crazy." Another source of worry is her nose which seems to her not to be shapely enough. She feels greatly depressed and life is a burden to her. She has frightful nightmares, dreams of dead people, especially of the insane woman. At day time she keeps on thinking of the insane woman.

A prolonged stay in the hypnoidal state made the patient feel happy immediately after the first treatment. The effect wore off after a day. A few more treatments made patient feel well and comfortable.

VI. J. R. Male. American. Age twenty-eight.

Family history as far as it could be ascertained is good. Occupation, artist. He has strong homosexual tendencies. Th sexual instinct for women is completely absent. A big man with immense hips is his ideal of sexual desire. His mind is full of images of males in various lascivious postures. The images disturb him much, so that he cannot carry on his work. When he comes in contact with men of the same inclinations he becomes excited. In his dreams he sees men who excite him and respond to his sexual passions. His mental and physical conditions are otherwise quite good, and he is doing work which is regarded to be of high grade.

In the hypnoidal state it came to light that at the age of fifteen he carried on a love affair with a room mate of his with whom he slept in the same bed. He always liked to play with boys, and, if possible, sleep with them in the same room. This he succeeded in accomplishing a number of times. Far, far away back in his childhood perhaps at the age of six, he was influenced by a big coachman who induced him to carry out homosexual practices. It was the aspect of that coachman that became with the patient the main object of his sexual passions. This incident was always hovering in his mind, although he did not remember it so distinctly as in the hypnoidal state.

A series of treatments by means of the hypnoidal state relieved the patient of his homosexual passions. The patient was not long enough under treatment to cultivate his degenerated or rather rudimentary normal sexual instinct. This gave rise to some unpleasant complications into which I cannot enter here. The patient was, however, entirely freed from his homosexuality.

VII. H. R. Male. Age twenty-six. Occupation, engineer. Father suffers from heart trouble; mother

died of some tubercular affection. Patient was operated for hydrocele and tubercular testicle some five years ago. He feels physically and mentally well, but is possessed by homosexuality. He can trace the homosexuality to his fourteenth year. It is not, however, the homosexual desires that trouble him, because they are weak; it is rather the absence of the heterosexuality that worries him, he wants to get married and have a good family life. He loves children and wishes to have some of his own. Any attempt on the part of the patient to cultivate heterosexuality meets with complete failure. He has no desire for women; in fact, he even experiences a dislike for them. He masturbates occasionally. The images which fill his imagination during the act of masturbation are entirely of a homosexual character.

The treatment was of rather short duration, about a few weeks in all, and the hypnoidal state could not be prolonged sufficiently to enable me to penetrate into the patient's subconscious life and trace the origin and development of the homosexuality. The hypnoidal state, however, enabled me to free him fro his homosexuality and to arouse in him an interest for the other sex.

VIII. Mrs. T. D. Age forty-five. American. Married. Father well. Mother died of some unknown disease at the age of twenty-five. One sister nervous, the other died of tuberculosis. Patient was a precocious child and extremely nervous. About the age of fourteen had typhoid fever; began to menstruate about the age of thirteen. At the age of sixteen entered a millinery store and at twenty became a modiste. She was then strong, healthy, vivacious, and enjoyed life. She had many admirers and finally got married at the age of twenty-five. After a few years of married life she became nervous, restless, suffered from headache, back-

ache, constipation and loss of appetite. She lost flesh, from one hundred and forty-five she went down to one hundred and twenty pounds. Menopause set in at the age of forty-two. She has been for some time under the care of a physician and has improved a little. She did not come to me, however, for her physical troubles, as she found that they really were of little consequence. "The whole trouble is mental. If you could only help me, I would make a clean breast of it. It has come now to a point that I need help."

She has no children, no responsibilities, selfish, full of fears about self; she is disappointed in her husband. Sexual relations have been normal. Recently she met a young married man with whom she fell in love as a distraction and stimulation in a life of dull, monotonous selfishness and fear. She is conscious that the whole thing is foolish, sentimental; moreover, the man is unworthy. She needs help to get rid of that obsession. "Life is not worth living." The patient is deeply depressed.

Patient was quieted by a little talk and then put into the relaxation characteristic of the hypnoidal state. At first she was restless and fidgety, but she gradually became quiet and relaxed. When she came out of the hypnoidal state she was quiet, composed and felt more self-control. After a few treatments, the patient felt considerably better, the fixed idea or insistent emotion lost its grip and she regained her self-possession.

IX. Mrs. B. F. Age thirty-eight. American. Occupation, physician. Patient comes of neuropathic stock. Both parents were highly neurotic. One of the brothers committed suicide. As a child, patient was sensitive and nervous, suffered from various fears. At the age of eight she had a bad fall, with unconsciousness. As a young girl she worked hard, but felt well. The first period after marriage was happy, but then had

a miscarriage which brought her down in health. Her nervous condition became aggravated by the suicide of her brother. Patient occasionally experiences illusions and hallucinations of memory and of recognition, a condition which she thinks she has inherited from her mother who has gone through similar experiences.

When I first saw the patient she was in great emotional excitement. She cannot eat, cannot sleep and is in agony. Wants to commit suicide. The mother-in-law tortures her, alienates her husband's love, intends to separate him from her. The evil eye of the mother-in-law "hypnotizes" her; patient "becomes transfixed and paralyzed by that gaze." Her will power is gone, her personality is fast disappearing under the baneful eye of the mother-in-law. Nothing but death is left to her.

The patient was quieted and then put into hypnoidal state with its characteristic relaxation. After the first treatment, patient felt somewhat relieved of that intense strain in which she was. After a few treatments by hypnoidization, she felt much better, "felt perfectly normal," "was herself again," was ready to meet the exigencies of life no matter how unpleasant they might prove to be. At the close of the treatment, patient regards her insistent desire to talk of herself as foolish and ridiculous; she realizes that she has magnified trifles, that she has misconstrued the relations of her husband to herself, that he really loves and is devoted to her as much as ever. Her emotional tone now is one of peace and repose; she has a good appetite, sleeps well, has no dreams, and has gained six pounds.

X. Mrs. S. D. Age thirty-two. American. Married. Family history shows neurosis. Masturbated early and for a number of years. She is very religious, is depressed on account of her sins. Suffers from insomnia, lassitude, great fatigue, crying spells, gastralgia,

loss of appetite, vomiting, heartburn. She is suggestible, capricious, irritable, sensitive, suspicious, suffers from morbid introspection, indecision and doubts. Likes routine; anything new frightens her. Always dissatisfied with life, becomes easily depressed and complains of all kinds of pain.

Treated by the hypnoidal state the patient improved considerably. No cure, however, could be effected as the patient's psychopathic condition was unfortunately kept up by the complicated, unfavorable family life.

XI. Miss D. M. Age forty-three. Family history good. Patient was well until a year ago, when menstruation became irregular and menopause set in. Patient suffers from backache, occasionally from intense pain around the sacral and coccygeal region and the back of pelvis. The pain shoots up the back of right and left sides; patient faints from dizziness. Some physician told her it was due to hemorrhage into the kidneys. She is nervous, restless, has lost her appetite, suffers from indigestion and from insomnia. A few months ago she happened to fall down from a car and since then she is afraid to board a car or to walk upstairs.

The patient was but a short time under treatment so that there was no time to follow the case closely, but she improved rapidly under the treatment by hypnoidization.

XII. Mrs. C. K. Age forty-five. Family history good. Children are all well. A year ago, at the oncome of climacteric period, patient became nervous, sleepless, lost her appetite, had flushes and flashes of light, suffered from headaches and worried a good deal. She is very religious, and is mortified by her unholy thoughts, she curses and blasphemes the Creator in her mind, and all kinds of filthy ideas trouble her, especially when she prays. She is in agony of fear; feels she is a lost soul. "God will not pardon such obscene, out-

rageous blasphemies on His holy name." Patient is despondent, feels greatly depressed and is unable to do anything, cannot do her housework and has lost interest in her family. She is indifferent to her friends and refuses all social intercourse. She keeps on brooding and is full of despair.

It took me some time to gain her confidence. It was at first difficult to keep her quiet and have her relaxed. After a few treatments by hypnoidization, improvement set in rapidly and she is now in excellent condition.

XIII. Miss A. W. Age thirty-five. Irish; housekeeper. Patient is well nourished. Physical condition is good; menstruation is normal and painless. Occasionally she suffers from headache, but on the whole headaches do not trouble her. She suffers much from auditory hallucinations and thinks she is possessed by demons. From her ninth years she suffers from hearing "spirit-voices" which sometimes tell her unpleasant things. Along with the hallucinations she also has attacks of automatic speech. Occasionally the automatic speech becomes uncontrollable. It appears to the patient, as if some other being forces her to tell what she thinks. It is on that account that she shuns society. Her family in Ireland, being aware of her trouble, thought it was demoniacal possession. Occasionally she has visual hallucinations of angels and saints.

It would take too much space to give a full account of this interesting case; we can only refer to it in its main outlines, as our object here is not so much the psychopathological as the psychotherapeutic aspect of the cases.

The patient could not be hypnotized, but she went easily into the hypnoidal state. At first the improvement was rather slight. In fact, now and then the hallucinations and the automatic speech became even

more frequent and more annoying than before. After a couple of months of treatment, the outlook began to be somewhat brighter, the auditory and visual hallucinations began to give way, the automatic speech considerably diminished and became more controllable. After a few months' treatment by hypnoidization, all the symptoms completely disappeared.

XIV. Mrs. M. R. Age thirty-eight. American. Married. Family history good, children well. Patient is pale, looks worried, nervous, has little appetite and suffers from insomnia. Suffers from headaches, pneumatosis, pyrosis, eructations, has attacks of vomiting. Menstruation is scanty, irregular, and painful. When about the age of nine, she met with an accident,—she fell out of a carriage and was unconscious; about the age of twelve, she had an accident with a runaway horse. Since that time she has the greatest terror to ride in a carriage, but enjoys much automobiling. She also has an uncontrollable fear of dogs. When a child, she was attacked by a dog and then heard and read a good deal about hydrophobia. In fact, after she was bitten by the dog, the sensations she experienced in the throat seemed to her to be hydrophobia. The fear of dogs occasionally sets in as an attack and comes to the surface of her consciousness during states of extreme fatigue. She especially suffered from it during pregnancy. Many of the details of the accidents were revealed in the hypnoidal state, although she had a general knowledge of them during her ordinary condition and was painfully conscious of them during many of the attacks. A number of details became subconscious and were disclosed during the hypnoidal state.

A series of treatments by hypnoidization greatly relieved the distressing symptoms, but the treatment was not continued long enough to obtain permanent results.

XV. Mr. C. B. Age thirty-nine. Single. Russian. Builder. Father died of apoplexy at the age of seventy-two. Mother is seventy-seven years old, but has always been nervous. Brothers and sisters are all well. Patient is rather undersized, about five feet, two and one-half inches, and weighs about ninety-seven pounds. He looks emaciated, anemic, cachectic. Has no appetite; suffers from indigestion, nausea, gastralgia. Anything unpleasant makes him feel nauseated. Detailed inquiry of early sexual life discloses no abnormalities. All those symptoms set on about twelve years ago when patient had an attack of gonorrhea of which he was greatly frightened and kept on worrying about its consequences. He suffered then a good deal from nausea, which afterwards persisted. The feeling of nausea became exacerbated with his father's death. Patient is extremely introspective and suggestible in regard to sickness. If any of his family happen to have some trouble, he is sure to be sick with the same symptoms. Thus, about two months ago, the patient's mother fell and broke her left arm. Patient began to feel pain in the left arm and had to be treated for it. He tells me that every new moon he experience irritation in rectum and around the anus. This e kept up from his boyhood and is due to the fact that about the time of the new moon his mother, in her old-fashioned super titious way, used to administer to him a purgative.

Put in the hypnoidal state, patient felt much relieved. The beneficial results of the hypnoidal treatment became manifest at the end of a few weeks.

XVI. Mr. J. R. Age twenty-eight. American. College education. Family neurotic. Patient is greatly emaciated. Appetite is poor. Bowels are costive. Sleep is disturbed by dreams and is usually restless. He is emotional, impulsive and has periods of

feeling of well-being alternating with periods of depression. In the periods of depression he is apt to become taciturn, gloomy, retiring and brooding over his health and mental troubles. For a couple of years in succession he somewhat lost in flesh, caught colds and coughed. The fear of consumption seized on him and he went to Arizona for his health. He was possessed by the fear of tuberculosis, although the best specialists assured him that his trouble was largely of nervous origin. In Arizona, the patient lived a regular, normal life in the open air, regained his physical health, and got rid of his fear of tuberculosis and colds. This, however, did not last long. A couple of years later, when he happened to catch a cold, the fear of tuberculosis reappeared. Any irritation in the trachea, any little cough due to some dust, any little congestion in the pharynx, meant a cold with its underlying fear of "consumption." This fear was further emphasized by a near relative who happened to suffer from colds. The patient was also obsessed by other insistent ideas. When he saw numbers, such as the date of the year, for instance, he added them, and liked that certain numbers, such as twenty-five or thirty-five, should come out. If the results did not come out, he kept inserting figures or subtracting until the desirable result was obtained. When he saw words, he looked at the letters and wanted that a certain number of "i's" and "r's" should be there. If the number of letters did not suit him, he inserted "i's" and "r's" to suit himself. The insistent ideas of this kind, however, were not accompanied by any emotional disturbances.

The treatment of the case covered a period of about two years. The condition was obstinate, difficult to control. The symptoms kept on recurring with great insistency. Persistent treatment, however, during the hypnoidal state, finally reduced the fears and the

insistent ideas. The patient lost his fear of consumption, did not catch so many colds; he cared little, if he did catch any. His brooding disposition left him, and he devoted himself to his work.

XVII. Mrs. J. F. Age twenty-eight. American. Married. Family history good. For many years has been suffering from headache, backache, general fatigue, weakness in the eyes, which occasionally becomes very painful. The headaches were sometimes intense, so that the patient was in agonies, the pains extended all over the head, shooting down the back. There were present sore spots in the back of the head, the pressure on which made the patient feel more relieved. During menstruation the headaches became more severe than usual. She also complained of various pains in the right iliac region. Patient's appetite was irregular, nothing tasted well to her, nutrition was poor, constipation present. She suffered occasionally from bulimia. The muscular condition was rather flabby. Heart in good condition, though somewhat irregular, due to the patient's nervousness. No albumen in the urine. A gynecologist diagnosed salpingitis and advised an operation on account of adhesions formed. The patient, however, refused to be operated. Patient gets a headache as soon as she reads a few pages in a book. This suggested the oculist, who measured her with a pair of glasses, but the eyes were as weak as before, the headaches were as easily induced and as persistent and severe as ever.

When under my care, after trying the gynecologist with his tampons and pessaries, and then again the oculist with his glasses, I was forced regretfully to abandon the advice of both professions and turn to my hypnoidization. The patient was glad to find that she did not need all those complicated professional outfits, and after a year's treatment felt, as she put it,

"younger than ever." The dysmenorrhea disappeared, the headache was gone, the eyes without spectacles felt far stronger and did not ache; she gained in flesh, and in strength, and is now in good health. A child born to patient a couple of years later helped the cure, regulating and moderating the impulse of self and instinct of fear.

XVIII. Miss G. A. American. Age fifty-five. Father died of pneumonia. Mother died of fatty degeneration of the heart. Three brothers died of various forms of cardiac lesions. One of the sisters had acromegaly and died of heart trouble. In the collateral branches of the family there are histories of tuberculosis. Patient looks poorly nourished; her appetite is completely gone. Menstruation stopped some ten years ago. Patient suffers from insomnia, headaches, backache, general diffused pains all over the body, complains of lassitude and loss of interest in what goes on about her. She feels despondent and has acute crying spells. She is afraid of losing her mind. When a child, used to suffer from night terrors. When about the age of twelve, she took a long, fatiguing journey with her parents. She was so exhausted that on her return she was aphasic and paraplegic, and was confined to bed for six months. The present condition set on a few years ago; she has lost the sense of smell and of taste, and is much depressed.

I must confess that when I undertook the case I did not expect any favorable results. It was an old, chronic, insidious case. The age of the patient as well as the family history were by no means encouraging. The first couple of months the treatment dragged along indifferently, all I could then say was that the patient did not get worse under the treatment. The hypnoidal state, however, gradually admitted me into the patient's early history and I obtained important clues to her

symptoms. Here comes in the value of the knowledge of the course and development of the malady and the consequent help in the treatment of the dissociated systems. With a better insight into the abnormal psychology of the case the hypnoidal state could be used to better advantage. The patient began to improve rapidly and at the end of the fourth month of treatment by hypnoidization completely recovered. It is now more than twelve years since the end of the treatment, and I may say that the patient has not had a single relapse, she continues to stay well, she has become an energetic social worker, greatly valued for her indomitable energy as well as cheerfulness of mind. People who know her say that "wherever she goes she brings sunshine with her." A new life was awakened in her. The subconscious reserve energy which has remained dormant in her for so many years has become unlocked and utilized in her ordinary daily life.

In the control of alcoholism the treatment by hypnoidization has yielded extremely satisfying results. The principle of subconscious reserve neuron-energy stands out clear and distinct in such cases. A few cases will, perhaps, best illustrate my meaning.

XIX. Mr. G. S. American. Single. Age thirty-seven. Family history is good, except that one maternal uncle was a victim of the drink habit. Patient is physically well developed. A physical examination showed an irregular heart due to drink and excessive smoking. Liver enlarged and cirrhotic. The patient was brought just after a debauch, was weak, nervous and shaky, with quite an extensive tremor of the hands. He began to drink when in school as a matter of boon companionship, and since then became addicted to the drink habit. He kept on drinking regularly, and at times actually soaking in alcoholic beverages. He has

gone through a series of treatments in various establishments for the cure of alcoholics, but with no appreciable results. As soon as he got out of the sanitarium, he immediately went off on a debauch. A number of times he suffered from severe attacks of delirium tremens. The family despaired of his condition, and he himself proposed to give up business and devote himself to his obsession.

Under a rigorous treatment by the hypnoidal state, the patient began to improve steadily. His physical and mental conditions grew in strength. After a few months' treatment he went back to his business. The man has become completely reformed in his habits of life. He is now manifesting an extraordinary activity, devotion to and steadiness in his work. No one suspected in him before such capacities of business management, such foresight and energy in carrying on his business. New stores of subconscious reserve energy have welled up from the depths of his being. He has become another man at whom his own brothers are surprised on account of the extraordinary change produced.

XX. J. L. Irish. Protestant. Age fifty-seven. Family history good, except for the fact that his brother is also addicted to drink and has been under my care for a few weeks, with the result of leaving off drink for two years and, after having had two relapses, has completely recovered. Patient is a printer by trade and has been drinking for over thirty years. While he is usually kind natured, when under the influence of drinks he is violent, abusive, offensive, and even brutal to his wife and eight children who are afraid of him. From his sister and from his wife I have the information that periodically patient goes off on a long spree and spends all his money, neglecting his wife and children, and when he comes home he

brutally abuses everybody in the house. "It is not a home, it is a hell," as his sister puts it. In his better moments the patient himself admits he is a brute, that drink has the best of him. He must keep away from drink completely, because the mere taste of it sets him going. An examination reveals the presence of arteriosclerosis.

I found the hypnoidal state would meet with no resistance. Hypnoidization then was the order of the day. The patient began to improve, was less nervous, slept better, and, what was more important, stopped drinking and did not crave for liquor. After three weeks of treatment, by means of hypnoidization, the patient was discharged. He did not drink for a whole year, but, coming in contact with other workmen in the union, he was invited to drink, could not refuse, and once more was started on his old career. He came back to me and this time I worked at him for a month with more perseverance. Throughout the treatment, the hypnoidal state was used. The patient has given up his drink habit, has no craving for liquor, works regularly at his job and no longer associates with companions who are given to drink. His sister and his wife keep me regularly informed of his condition and the report for the last two years has been: "John is very good, he is a gentleman, treats the children well." He has become a model father and a good husband.

XXI. C. T. Age thirty-two. American. Single. Family history bad, father drank, was off on sprees, and was drowned while in a state of intoxication. A maternal as well as paternal uncle were confirmed drunkards, and there was drunkenness in the collateral branches of the family. The patient learned to drink when very young. His mother, who volunteered the information, told me that she suspected that the

patient learned to drink at the age of seven. Since that time the drink habit grew on him, and finally he took to liquor and became a habitual drunkard at the age of twenty. The physical condition of the patient is good. The patient is of a mild disposition, but it seems as if the alcohol has soaked all the good out of him. He has no ambition, and is not fit to do anything, he is constantly under the influence of drink. He has no will, no responsibility and nothing of any importance can be intrusted to him. Socially, he is ostracized by his relatives, but he seems to mind it little.

The family and the personal history, as well as the condition of the patient, greatly discouraged me. I felt there was no chance for him, no use of trying even. The family insisted on treatment, even if there was only one chance in a thousand that the patient could be saved. The mother was anxious to put him under my treatment, he was her only son. The treatment of the patient lasted for about a year, and was carried out by means of the hypnoidal state. To my great surprise, and contrary to my expectation, the patient has completely given up his drink. In fact, he changed so much that his own mother wondered at the transformation. He became ambitious, manifested a self-control which none who knew him had ever suspected in him. He became methodical, systematic, and conscientious in his work, and showed an unusual ability in management. From being weak and unreliable in character, he became firm and trustworthy. His abilities were soon noticed and appreciated, and he has since become a manager of a large concern. I may add that the only traits that remained to him from his former life were his kindheartedness and effusiveness. Nowhere have I seen such limitations, moral weakness, and lack of capacity changed to strength of will and

purpose combined with ability to guard and guide complicated interests of a large business. After a case like that with so little hope I am more guarded as to the possible outcome in treatment of apparently the most hopeless alcoholic case. There is more efficacy in the treatment by the hypnoidal state than I have dared to think of.

CHAPTER XX

THE HYPNOIDAL STATE AND RESERVE ENERGY

WE have pointed out that a dissociated, subconscious system reacts reflexly with an energy uncontrolled and unrestrained by other systems. Associated systems, on the other hand, control, regulate and inhibit one another, with a consequent saving of neuron-energy. We have further pointed out that in a group of associated systems each component system becomes less accessible to external stimulation, as far as reaction is concerned,—it responds less readily with a discharge of energy. The external stimulus must rise above the ordinary stimulus to set the system into activity. In proportion as the complexity of the group of systems grows, the threshold to which the group reacts keeps on rising, and may, in fact, even amount to a total inhibition.

This principle of rise of threshold and of total inhibition due to group-complexity is well illustrated by the remarkable experiments carried on in Professor Pavlow's laboratory.

When a stimulus is associated with that of the conditional reflex, the result is not an increase, not an indifference to, but a total inhibition of, the conditional reflex. Vasiliev, working in Pavlow's laboratory, associated the sound of a metronome with the conditional reflex of a scratch stimulus. He finds that the process of inhibition runs in three phases for intense associated stimuli and in two phases for weak ones.

	I Phase.	II Phase.	III Phase.
Scratch stimulus	1.6cc.	1.0	2.0
Scratch stimulus and sound of metronome	0	0.4	0
Scratch stimulus		0.3	2.6
Scratch stimulus		0.6	1.2
Scratch stimulus and sound of metronome			0

Savadsky has modified the conclusions of the previous investigators, but he affirms the fact that an intense stimulus, an intense sound, completely annihilates the secretion due to scratch-stimulation, while a weak stimulus, a weak sound, produces a lesser effect. He finds that the external stimulus disturbs or inhibits the condition of the nerve centers, inhibits the condition which is predominant at that moment, stimulating the inhibitory stage and inhibiting the excitatory stage; in other words, *inhibiting whatever process is at that moment taking place.*

The following table, showing the inhibitory influence of intense stimulations associated with the conditional reflex, may serve as an illustration. The conditional reflex is formed from a scratch-stimulus, intense whistle, or intense sound of bell as simultaneous extraneous stimulation.

	Magnitude of the Conditional Reflex in Drops.						
	Parotid Gland.						
	1st ½ m.	2d ½ m.	3d ½ m.	4th ½ m.	5th ½ m.	6th ½ m.	
	0	0	0	4	5	7	
	0	0	0	7	12	12	
Intense sound of whistle—	0	0	0	1	2	2	—The effect of simultaneous stimulation
	1	0	3	7	14	17	
	1	0	0	8	10	12	
Intense sound of bell—	0	0	0	0	0	0	—The effect of simultaneous stimulation
	0	0	0	0	2	8	
	0	0	0	3	5	10	

In summarizing the work of previous investigators in Pavlow's laboratory, Orbeli says: "Vasiliev and Mishtovt have shown that any phenomenon indifferent in itself may not only become a source of a new conditional reflex, but may become a special inhibitory agent in relation to the existing conditional reflexes, it is only requisite that the phenomenon should be repeatedly associated with the conditional reflex in such cases when the latter is not reinforced, that is, when not accompanied by the unconditional reflex. If for instance, phenomenon *A* coincides in time with the unconditional reflex of the salivary gland, the phenomenon *A* becomes a source of conditional salivosecretory reflex. If, however, in cases when *A* comes separately without the unconditional reflex, a new phenomenon *B* is associated with *A*, *B* gradually becomes a source of inhibition of the conditional reflex. The relation formed is such that *A* phenomenon by itself calls out a secretion of saliva, while in association with *B* does not call out any saliva; that is, *B* inhibits the action of *A*. That phenomenon is termed in Pavlow's laboratory "conditional inhibition." *B* is the conditional inhibition in relation to the conditional reflex on *A*. This quality of the nervous system to work out special cases of inhibition makes the conditional reflexes an extremely delicate and perfect index of reactions of the organism to its external environment. The animal reacts only to those phenomena which really coincide with that or other specific stimulation and serve as signals of the latter. When, however, an extraneous stimulus becomes associated, a stimulus which serves as a signal of unreality of the nervous phenomenon, the reaction becomes arrested and the organism thus rids itself of fruitless labor."

On the strength of his own experiments performed on the visual reflexes of the dog, Orbeli comes to the

same conclusion with Vasiliev and Mishtovt, Babkin and Savadski, "that every phenomenon which coincides with the conditional reflexes in all cases when the latter is not accompanied with the unconditional reflex becomes an inhibition in relation to that same conditional reflex."

Similarly, in the experiments now carried on in my laboratory, I find that when a galvanic deflection is brought about by a specific stimulation of painful character, the co-existence of another stimulation is apt to decrease the magnitude of the galvanic reflex.

The more numerous the components of a system become, the more the given group of systems grows in complexity, the longer becomes its latent period of stimulation, the higher rises its threshold, the greater, we may say, is the inhibition of its activity. We may say that the inertia of a group increases with its mass. To set into activity a complex system, a greater stimulus is requisite than the one necessary to set into function any of the individual components. The *minimum* threshold of the system must at least be the *maximum* threshold of one of its constituents. As Sherrington puts it: "Yet it is also clear that the threshold for any whole arc cannot be lower than the highest individual threshold in it. Similarly, an additive influence of the threshold will make the reflex chain, consisting of several neurons, offer *caeteris paribus* higher resistance than a chain of fewer neurons. It is in accord with the rule that the reflex chain which conducts to parts segmentally distant requires generally intenser stimulation to excite them than do merely local arcs."

All other conditions remaining the same, the arousal of a complex system requires also an increase of time. The higher and more complex the nervous and mental processes are, the greater are their reaction times. With the complexity of the group of associated systems

belonging physiologically to different and distant parts of the cerebral system, the initial stimulation or stimulus-threshold becomes greater and the time of stimulation or latent period becomes longer. In other words, the threshold of the group rises with the increase of associative components belonging to different spheres of sensory regions with their concomitant presentative and representative elements, forming the synthesis of the organized group.

A great number of associations are formed in the course of life-adjustments, with the result that the thresholds of some or even of many systems may become inaccessible to the ordinary stimuli of the customary environment. The life reactions of the individual may thus become limited and narrowed down to a contracted sphere of activity in response to a limited number of stimulations. Consciousness and life interests become narrowed, contracted, giving rise to various forms of psychopathic dissociations and affections with their anaesthesias, motor paralyses and abulias, with their inhibitions of functions of various systems in the domain of sensation, emotion, intellect, and will.

This rise of threshold, and the concomitant, systemic, mental paralysis with its consequent limitation of response and reaction to the external environment, should, however, be regarded as forming but one side of the psychopathic affections. The inaccessible regions lie fallow and await the favorable moment for the manifestation of their riches and fertility. The inactive systems, being in their resting, anabolic stage, become surcharged with latent energy awaiting the appropriate stimulus effectual in the liberation of the dormant energy. This subconscious, dormant, reserve energy is of the utmost consequence to the individual in the critical moments of his struggle for life. In the struggle

for life such a surplus of energy is a great advantage to the organism. Those organisms have a better chance for survival that have laid by for a rainy day; the chance of survival becomes greater as the stored-up energy is greater. This principle of reserve energy was set forth by Professor James and also by me in my various works.

The late Charles S. Minot, the great American histologist, points out from another standpoint, this reserve energy present in the organism, a reserve energy of growth called forth under special emergencies of life.

"How many of you have thought what the lesson of the skin is in regard to the power of growth? Spring is coming; we shall soon be taking to our boats, rowing or canoeing, and the first day we do so, doubtless, we shall have blisters upon our hands, and the outer part of the skin, raised by the blister, will probably fall off and be lost altogether. The softer, underlying skin will be exposed, will be sensitive and uncomfortable for a while, but soon the cells behind the surface will assume a horny character, the cells underneath will grow and multiply, and presently the wound will be healed over. Did you ever stop to think that that means there is *a reserve power of growth in the skin* all the time, always ready to act, to come forward, waiting only for the chance, and that there is besides something which keeps it in, which holds it back, which stops it? We call this stopping physiological function—inhibition."

By a striking series of instructive facts, Dr. Meltzer points out that "all organs of the body are built on the plan of superabundance of structure and energy." Like Minot, Meltzer refers to the significant fact that most of our active organs possess a great surplus of

functioning cells. This surplus is requisite for the safety of the individual.

The principle of reserve energy is of the utmost importance to abnormal psychology. The principle is based on a broad generalization of facts,—psychological, physiological and biological,—namely, that far less energy is utilized by the individual than there is actually at his disposal. A comparatively small fraction of the total amount of energy, possessed by the organism, is used in its relation with the ordinary stimuli of its environment.

The energy in use may be regarded as the *kinetic or circulating energy*, while the energy stored away is the *reserve energy*. There must always be a reserve supply of energy requisite for unusual reactions in emergency cases. Those organisms survive which have the greatest amount of reserve energy, just as those countries are strong and victorious in the world-market which possess the largest amount of reserve capital to draw upon in critical periods.

As life becomes more complex, inhibitions increase; the thresholds of stimulations of a complex system rise in proportion to its complexity. With the rise of evolution there is a tendency to increase of inhibitions, with a consequent lock-up of energy which becomes reserve. Now there are occasions in the life of the individual, under the influence of training and emotional trauma, when the inhibitions become unusually intense and tend to smother the personality, which becomes weakened, impoverished in its reactions and is unable to respond freely to the stimuli of its environment. The inhibited system becomes inactive and may be regarded as *dissociated* from the cycle of life.

In case of an emotional trauma there is often a breach in the continuity of association. The

affected system becomes dissociated from the rest of the personality and is like a splinter in the flesh of the individuality. Its own threshold, when tapped, may be very low, but it is not directly accessible through the mediacy of other systems; hence its threshold appears unusually or pathologically high. When the inhibitions are very high they must be removed. This removal of inhibitions brings about an access to the accumulated energy of the inhibited systems. In case of disjunction or break of continuity we must stimulate the dormant reserve, energy of the systems, and thus assist the process of repair and bridge the breach of associative continuity. A new, fresh, active life opens to the patient. He becomes a "reformed" personality, free and cheerful, with an overflow of energy.

The hypnoidal state is essentially a rest-state characterized by anabolic activity. There is a restitution of spent energy; inhibitions become removed, and access is gained to "dormant" systems or complexes. The awakened "dormant" complex systems bring with them a new feeling-tone, a fresh emotional energy resulting in an almost complete transformation of personality.

As an illustration of the transformation effected, I take at random the following extracts from some of the letters written to me by patients who have experienced this welling up of reserve energy: "Indeed, were I to fill this entire sheet with expressions of the gratitude which wells up from my inmost heart it would be only a beginning of what I feel. Surely the darkness of the world has been dispelled since this *new light* has illuminated my soul, and I *feel that this wondrous light will never fail me.* It were vain to attempt to thank you for this wonderful transformation."

A letter from a patient reads: "You will be glad to know that all is well with me. Life is one happy day. I am a marvel to my friends in the way of happiness and cheer. I have to confess that I feel almost wicked to be so happy."

Another letter runs as follows: "Next to the gladness in my own restoration, I am rejoiced at the wonderful transformation that has come to my dear friend T. from your treatment. She writes me most enthusiastically of her steady and sure progress toward the goal of perfect health, of her strength to take up the home duties which had been so burdensome and which she now finds a delight in the doing of them; and of her husband's and friends' joy in the transformation that has been wrought in her."

The following extract from a letter, written to me by a patient, an experienced English surgeon, whose case was severe and chronic, dating from early childhood, is extremely valuable, both on account of his medical training and mental abilities which make him an excellent judge as to the fundamental change and cure effected:

"It is now exactly two years since I was undergoing treatment at your kindly and sympathetic hands. I remember that you once told me that the seed sown by you would probably take this length of time to come to full fruition. Therefore, it may not be without interest to you to receive a supplement to many other letters in which I will endeavor to summarise my progress,—for the last time.

"I have no longer even the least lingering doubt that you can count me among your most brilliantly successful cures. I say this after many,—too many heart searchings which are probably characteristic of my somewhat doubting temperament. At first, I was disappointed with the whole business: I suppose I

looked for strange and dramatic events to occur which would change my whole personality and temperament in a short time. Nothing so exciting happened: I left Portsmouth still feeling that I owned the same name, and very much the same 'ego' that I arrived with. I was unaware that any profound psychological operation had taken place. To be candid, I did not think it had,—the beginnings, no doubt, were there,—but no more. But now when I carry my mind back to the type of obsession which used to assail me—Is there any change? Good God! I behold a miracle, although it has come about so silently that I can only realize the difference by comparing the present with the past.

"In conclusion I can only send you my undying and inexpressible gratitude . . . You have saved me from what, I honestly believe, would have one day resulted in deliberate suicide which I often contemplated as the one solution for my trouble". . . . .

These extracts are typical of many others, and clearly show the enjoyment of new strength and powers until now unknown to the patient. Fresh reservoirs of reserve energy have been tapped and have become available in an hour of dire need. The patient has light and strength where there were darkness and depression. We are confronted here with the *important phenomenon of liberation of dormant, reserve nergy.* The patient feels the flood of fresh energies as a "marvelous transformation," as a "new light," as a "new life," as a something "worth far more than life itself."

The hypnoidal state helps us to reach the inaccessible regions of dormant, reserve energy, helps to break down inhibitions, to liberate reserve energies and to repair the breaches of mental life. The painful systems become dissociated, disintegrated and again transformed, reformed, and redintegrated into new systems full of energy and joy of life. *The whole process is one of*

disintegration and redintegration with the awakening of dormant, reserve energy.

The essential condition of the psychopathic, of the neurasthenic, or the psychoasthenic, of all the various forms of recurrent mental states, is just that need of putting forth energy in response to claims of life, in response to stimuli from the external environment. The creditors' claims cannot be satisfied and the individual goes into insolvency, in spite of the riches of which he is the owner, but not the master. He starves in the midst of locked-up plenty of which he is the rightful possessor. In other words, *psychopathic patients cannot use their reserve energy at the critical moments of life.* Excluded, by an uncontrollable and intensifying fear instinct, from the enjoyment of what Aristotle and the ancient Greeks regarded as the real happiness of man namely, "the energy of exercising the soul according to reason," excluded from the enjoyment of self-activity and from the normal exercise of powers and functions of the organism as a whole, the patient resorts to sex, drink, drugs and other stimulations which may temporarily arouse him, calling forth fresh reserves of the ebbing, vital energy. Such stimulations by the pathological processes which they bring about further intensify the self-impulse, increasing the terrors of the fear instinct, finally resulting in complete exhaustion and prostration, with all the accompanying psychopathic symptoms. Closed against the voluntary control of the psychopathic individual, the energy, the systems, dissociated by the great rise of thresholds, can be awakened to spontaneous activity by some accidentally occurring, appropriate stimulation. We find, therefore, in psychopathics a diminution, a loss, an inhibition of voluntary activity and a concomitant intensification of automatic reactions. *Psychopathic states are characterized by paresis or paralysis of will*

and by predominance of automatism, by recurrent mental-states, or by recurrent psycho-physiological processes characteristic of the psycho-biological types of recurrent moments consciousness.*

We find in psychopathic states a weakening or even paralysis of the higher voluntary functions and an over-action of the lower automatic functions. The weakening or paralysis of the higher psychic functions in psychopathic states is not due to deterioration, but to dissociation, to the rise of thresholds and to the lock-up of surplus reserve energy.

The value of the hypnoidal state for the treatment of psychopathic affections is in the lowering of the high thresholds, and in the formation of associations with utilization of accumulated stored-up energy requisite for the restoration of the higher psychic functions, for the exercise of the voluntary and personal control over the dissociated, automatically or subconsciously functioning groups of systems. The hypnoidal state is essentially a primitive rest-state and has been utilized almost from the very origin of animal life for the repair and restoration of worn-out organs and impaired functions. Unlike the waking state, the hypnoidal state does not present any special adaptations to the external environment. The only use of the hypnoidal state is repair of impaired functions and utilization of fresh energies. We can still use the hypnoidal state for the same purpose.

The rigidity of group associations, requisite in the struggle for existence, gives way in the hypnoidal state. In the subwaking state there is a reduction, a redistribution and fall of thresholds, with a consequent potential reformation and recombination of systems into new groups and aggregates. The hypnoidal states may be taken to represent an indifferent or

*See *The Foundations, Part II, Chapter II.*

neutral, mental, psycho-physiological equilibrium. We can utilize this primitive state to bring about a more favorable change in the disturbed equilbrium of the narrowed, dissociated, impoverished, enfeebled and full of automatism, degraded, waking life.

The overacting dissociated systems with their automatic reflex reactions may form associations with other systems, and thus become inhibited as well as controlled in their function by the voluntary activity of personal consciousness, while the inhibited systems with their raised thresholds and accumulated reserve energy are set into function. It is, therefore, possible to bring about a greater vigor of personal activity, a more efficient control of reactions to stimulations, a better adjustment of the organism to the conditions of its environment. It is by means of such readjustment of disturbed psycho-physiological reactions that psychopathic affections are restored to normal functioning, and thus get cured in the subconscious, subwaking, hypnoidal state.

The pathology of psychopathic maladies is essentially a morbid state of the impulse of self-preservation with its accompanying fear instinct. We cannot help agreeing with Mosso that "fear is a disease to be cured." Psychopathic maladies are curable and preventable. The practical aim of Psychopathology is the complete eradication and prevention of psychopathic diseases.

Aberration, mental, 27
of self-consciousness, 346
Abnormal mental life, 81
suggestibility, 38, 364, 365
Accumulative moment, 75
Activity, cellular, 27
neuron, 130
Adrenal secretion, 63
Affection, cardiac, 360
etiology of, 26
psychopathic, 54, 55, 56, 57, 58, 127, 184
Affective elements, 351
Aggregate of moments, 75, 82, 84
neurons, 339
psychopathic, 69, 70, 71, 72, 112
social, 161
Agoraphobia, 37, 169, 181, 182
Aichmophobia, 37
Ailurophobia, 182
Aim of psychopathology, 408
Alcoholism, 391, 392, 393, 394
Alternation, emotional, 65
Amnesia, 77, 79
Anabolic activity, 403
process, 341
stage, 400
Anabolism, mental, 332
Analysis, sexual, 338
Angina pectoris, 58
Anguish, 90
Animal instincts, 346
Antagonism, mental, 334
Antagonistic reactions, 334
Anthropology, vi
Anxiety, 33, 34, 38, 43, 46, 50, 62, 67, 262
precordial, 50
states, 70
Aphasia, motor, 181
Arbitrary meaning, 238
Archoplasmic structures, 355
Aristotle, 406
Arndt, 63
Arteriosclerosis, 181
Arthorpoda, 353
Assimilations, law of, 249
Associated systems, 396
Associations, 70, 354, 400
indirect, 347
sexual, 24, 27, 32, 37, 80, 338, 354, 368, 400, 402
Associative activity, 25
life, 133
Asthenopia, 137
Asthma, psychopathic, 179 181
Astrophobia, 37
Atavism, 336, 356,
Atavistic states, 66
Athletic treatment, 360
Atrophy of function, 95
Attention, 374, 375
concentration of, 138
distraction of, 91
fixity of, 38
Automatic, 74, 84
Automatism, 91, 340, 342, 406, 407, 408
Auto-toxic products, 27

Babkin, 63, 399
Bacon, 42, 90
Bain, 34, 39, 54
Basis of psychopathies, 223
Bechterev, 51
Belief, eugenic, v
Bidder, 21
Biological law, 356
  phenomenon, 356
Biology, iv
Blood pressure, 160
Brain, fatigue, 361
  sclerosis of, 140
Breakdown, nervous, 145
Brooding, 208, 216, 217, 224, 346
Brooks, 35

Cannon, 63
Cardiac affection, 360
Carlyle, 344
Catalepsy, 266
Causation of psychopathies, 184
Causation of subconscious states, 38, 41, 53, 57, 62
Cellular activity, 27, 132
  nutrition, 26
Central elements, 121
  exhaustion, 140, 361
  nervous system, 21
  overstrain, 143
Character, egocentric, 111, 116
Chemical moment, 22
Child experiences, 66
  life, x
Childhood, 62, 63, 74, 93, 114, 123, 124, 172, 184, 186, 200, 220, 235, 260, 274, 279, 318
Chromatin, v
Civilization, i, ii, v, 36, 46
Classification of diseases, 26, 28
Claude Bernard, 21
Claustrophobia, 37
Cognitive states, 66
Compayré, 59
Complex nervous organization, 111
Conditional reflex, 22, 25, 37, 53, 396, 397, 399
Conditions of suggestibility, 40, 364, 365, 374
Conscious moment, 23, 75, 79
Consciousness, 38, 66, 73, 74, 77, 79, 184, 400
  disaggregation of, 38, 84
Constellation, 81
Construction of personality, 333
Contrast, emotional, 66
  emotions, 66
Control, of births, vi
  principles of, 65
Course of treatment, 331
Craving for stimulations, 135
Crile, 48, 51, 59, 133
Critical moments, 406
Curari, 355
Custom, 342
Cyclical movement of moment, 80
Cytoplasm, 27, 133

Darwin, 21, 33, 35, 50, 54
Death, fear of, 166
Degeneration, process of, 81, 83
Dejerine, 359
Demoor, 95
Depressants, 27
Desultory moment, 75
Deviations, psychopathic, iv

Diagnosis of psychopathic maladies, 184
Differentiation of psychopathic affections, 31
Direct suggestion, 336
Disaggregation of consciousness, 38, 84
Disaggregative moment, 81
Diseased personality, 344
Diseases, classifications of, 26
28,
functional and nervous 27
Disintegration, cellular, 27, 132
method of, 335
Dissociation, 38, 132, 368
mental, 81
principles of, 67
Distraction of attention, 91
Dominance, principle of, 68
Donley, J., 368
Dormant energy, 400, 403
systems, 403
Dream consciousness, 80
life, 260
Dreams, 229, 230
Drug habits, 373
Dynamic energy, 129, 131, 133, 135
Dynamogenesis, principle of 68, 338, 339
Dyspnoea, 197, 198

Education, 1, 137, 356
Efficiency, v
Egocentric, 348
character, 111, 116
Egotism, psychopathic, 116, 121, 127
Elements, affective, 351
afferent, 350, 351
central, 33, 351
efferent, 350, 351
motor, 351, 352
primary and secondary, 80
psychomotor, 356
recessive, 68
sensory, 350, 351
Embryonic type, 356
Emotional contrast, 66
Emotions, 63, 349, 380, 381, 382
Energid, 129
Energy, 54, 135, 138, 340
dynamic, 129
kinetic, 402
liberation of, 130, 405, 406
static, 129
Environment, 11
Epicurus, 343
Epilepsy, 36
hystero, 38, 381
Jacksonian, 254
larval, 23
psychic, 356
Equilibrium of neuron aggregates, 340
Ergograph, 160
Etiology of neurosis, 179
Evolution, psychopathic, 72

Fading moments, 73
process, 76
False recognition, 231
Fatigue, 110, 136, 137, 144, 151, 155, 156, 360, 366
cerebral, 360, 361
fear, 144, 145
Fear, 33, 34, 35, 37, 39, 43, 46, 48, 50, 63, 68, 85, 93, 120, 123, 133, 134, 145, 162, 280

Fear, of death, 166
instinct, 33, 37, 39, 40, 41, 43, 44, 47, 50, 51, 52, 53, 54, 57, 59, 62, 63, 64, 69, 86, 87, 88, 96, 111, 116, 119, 122, 144, 163, 186, 246, 342
nucleus, 69
testing, 342
Feeling of excitement, 65
Field of attention, 334
Fixation of attention, 38
Focus of consciousness, 79
Food reactions, 83
Frazer, 36
Functional psychoses, IV, 32, 41, 52
trauma, 402
Functions, law of, 95
Furies, psychopathic, 128

Galvanic reflex, 399
Genesis of psycho-neurosis, 249
Germ-plasms, V
Germs, psychopathic, 224
Giddings, 161
Glandular secretions, 63
Glycosuria, 63
Goitre, exophthalmic, 49
Goltz, 51
Grave's disease, 49
Group of systems, 399, 400
Gynophobia, 270

Habits, 83, 84
psychopathic, 341
Habit-tics, 270
Haller, 50
Hallucinations, 80, 257
Happiness, psychopathic, 99, 100, 121, 134
Health, psychopathic, 95, 97, 115, 121, 124, 345
Heart affection, 142
Hematophobia, 182
Hemicrania, 266
Hemiplegia, 181
Heredity, I, IV, V, VI
Hierarchy of moments, 73
High types of moments, 82
Homicidal impulse, 78
Homosexuality, 380, 381
Human personality, 194
Hypertrophied fear instinct 69
Hypertrophy of self-preservation, 96
Hypnoidal, method, 210
states, 74, 204, 206, 218, 246, 269, 347, 363, 364, 367, 370, 372, 374, 375, 407
Hypnoidic states, 74
Hypnoidizations, 184, 362, 364, 365, 367, 368, 370
Hypnonergic states, 77
Hypnosis, 73, 77, 266, 363
Hysteria, 23, 137
Hystero-epilepsy, 23

Ideas, imperative, 78
Ideo-motor life, 351
Ideo-sensory stimulations, 21
Imperative impulses, 29, 78
Impulse of self-preservation, 85, 86, 90, 96, 116, 119, 122, 127, 162, 186, 194, 246, 342
Impulses, homicidal, 78
suicidal, 78
Impulsiveness, 339
Indirect association, 347
suggestion, method of, 336, 347

Inhibition, 22, 25, 38, 70, 90, 132, 188, 375, 396, 397, 398, 399, 402, 403
conditional, 398
principle of, 69
Inhibitory stage, 396
Insomnia, 89, 142, 143, 144, 152, 155
Instinct, 349
nature of, 349
organized, 82
of reproduction, 96
sex, 82
Integration, method of, 340
Intelligence, psychopathic, 358
Intensity of psychosis, 73
Interest, psychopathic, 96
Intermediary stages, 75, 76, 78, 80
Interpretation, method of, 336
Irradiation, principle of, 67

Jacksonian epilepsy, 254
James, 33, 68, 129
Janet, 201, 216
Jukes, the, vi

Kinaesthetic associations, 357
memories, 354, 357
sensations, 357
sensibilities, 355
Kinetic energy, 402
Kinocentre, 355
Kinoplasm, 355
Kirchoff, 45, 51
Kraepelin, 46, 51

Labile elements of consciousness, 356
Lack of confidence, 344
Larval epilepsy, 340
Latent energy, 69
Law of assimilation, 249
Law, biological, 356
of contrast, 66
of disaggregation, 82, 84
of function, 95
of geometrical progression 162
of modifiability, 72
of moment degeneration 82, 187
of moment reversion, 80
of recession, 73, 187
of reversion, 76, 80, 187
social, 27, 161, 162
of suggestibility, 364, 365
Legislation, eugenic, vi
Liberation of energy, 130
of reserve energy, 405, 406
Life, abnormal, 81
dream, 260
Limitations, psychopathic, 345
of self, 346
Logical activities, 358
Loss of personality, 199
Lotzko, 51
Low types of moments, 82
Lucretius, 344

Magic, psychopathic, 348, 349
Mal-adjustment, 348
Malthusian control of birth, vi
Manic-depressive psychoses, 66
Manifestation of psychopathic maladies, 55
Meaning, arbitrary, 238
psychopathic, 336, 337
of symptoms, 336, 337

Measures, eugenic, VII
Melancholia, 83
Meltzer, 401
Memories, kinaesthetic, 354, 356
Memory, 77, 139, 204, 355
Mendelian terms, 66
Mental aberration, 27
activity, 352
alienation, 83
alternations, 66
anabolism, 332
antagonism, 334
defectives, 357
dissociation, 81
Metamorphosis of fear, 69
Metathesis, method of, 334
Method of conditional reflexes, 22
of disintegration, 335, 337
of eugenists, VII
hypnoidal, 210
of indirect suggestion, 347
of integration, 340
of metathesis, 334
psychognostic, 184
psychotherapeutic, 332
of synthesis, 340
Methods of direct association, 347
indirect associations 347
Minds, unstable, III
Minot, C. S., 401
Mishtovt, 32
Mitchell, 371
Modifiability, of elements, 380, 381, 382
law of, 72
Moment, accumulative, 73, 75, 82
chemical, 22
consciousness, 23
cyclical movement of, 80
degeneration, law of, 82, 187
desultory, 75
outlived, 73
reversions, law of, 80
subconscious, 79
Monotony, 38, 135
Montaigne, 43
Moral life, 83
Mosso, IV, 50, 62, 136, 137
Motor elements, 355
memories, 354, 355
Multiple personality, 57
Mysophobia, 175

Narcosis, 84
Natural selection, 132
Nature of instinct, 349
Necropathies, 26, 27, 28, 132
Neophobia, 342
Nervous breakdown, 145
energy, 54, 129
system, central, 21
Neurasthenia, 23, 142
Neuron activity, 130
aggregate, 339
complex, III
energy, 129, 135, 339, 340
Neuropathies, 26, 28, 129, 132
Neuro-psychosis, 31, 32
Neurosis, 69
acquired, IX
functional, X
hereditary, IX
Neurotic affections, etiology of, 26
Non-fulfillment of desire, 66
Nucleus, primordial, 71
psychopathic, 71, 72, 335
Nutrition, cellular, 27

Obsession, 29, 31, 62, 65, 70, 121
Occasions, psychopathic, 163
Omens, 237, 238, 268
Omen testing, 223
Ontogenesis, 82
Ontogenetic development, 350
Oppenheim, 45, 51
Orbeli, 22, 24, 63, 398
Organic diseases, 26
energy, 130
Organopathies, 26, 129
Ornithophobia, 179
Outlived moments, 73
Over-fatigue, 359

Panophobia, 256, 257, 262, 270
Paralysis of will, 406, 407
Paranoia, 83
Paranoidal aspect, 116
Parasitic egotism, 127
Parasitism, 95

Pathological focus, 69
processes, 27, 91
Pathology of functional diseases, 27
of psychopathic diseases, 85, 408
Pathophobia, 101, 125, 176, 177
Pavloff, 21, 22, 24, 25, 37, 53
Periodicity of function, 339
Periods of activity, 362
of repose, 362
of trauma, 288
Peripheral exhaustion, 361
Personality, construction of, 333
embryonic, 39
loss of, 199
reformed, 403
Phobia, 46
Phrenophobia, 101, 176, 200
Phylogenesis, 82
Phylogenetic evolutions, 350
Pinel, 139
Plasticity of nervous system, 25, 408
Pneumo-gastric nerve, 21
Polyuria, 47
Potamophobia, 179
Predisposition, VII, VIII
Pressure, blood, 160
Primary and secondary elements, 80
Prince, Morton, 199, 201
Principles, of complication, 64, 187
of control, 65
of differentiations, 67, 187
of diffusion, 67, 187
of diminishing resistance, 69, 187
of dissociation, 66, 187
of dominance, 68, 187
of dynamogenesis, 68, 338, 339, 340
of embryonic psychogenesis, 64, 187
of fusion, 65, 187
of inhibition, 69, 187, 396
of irradiation, 66, 187
of metathesis, 70, 71, 187, 350
of modification, 350, 358
of proliferation, 64, 187
of recession, 66, 187
of recurrence, 64, 187
of reserve energy, 129, 391
of synthesis, 65, 187, 340
of variations of neuron energy, 186

Process of association, 81, 82
degeneration, 27, 84, 85
disaggregation, 81
reduction, 75
Products, auto-toxic, 27
Psychic, compound, 53
epilepsy, 356
moment, 22
Psychoasthenia, 23
Psychogenesis, 37, 64, 333
Psychogenetic examination, 52
Psychognosis, 51, 70, 71, 72, 136, 184, 196, 363
Psychognostic method, 184
Psychoneurosis, 28, 29, 30, 31, 32, 36, 57, 58, 90, 163, 331, 333
Psychoneurotic, 185
affections, 57
Psychopathic aggregate, 69, 70, 72, 112
deviations, IV
diseases, 33, 43, 47, 163
Psychopathic furies, 128
germs, 224
happiness, 99, 101
health, 95, 97, 115, 121 124, 345
interests, 96
maladies, 184
manifestations, 55
states, 38, 58, 64, 67
systems, 72
Psychopathies, 23, 24, 28, 30, 36, 52, 129, 132
basis of, 223
causation of, 184
Psychopathological principles, 72
Psychopathology of neurosis, 63
Psycho-physiological equilibrium, 408
Psychosis, functional, IV, 32, 41, 52
Psychosomatic, 185
Psychotherapeutic, methods, 332,
standpoint, 72
Psychotherapy, 332, 335, 338, 362

Quack literature, 164
Quadrumana, 353
Quality of feeling, 71
Quest of health, 126

Reaction time, 399
Reactions, 24, 25
Recall, 354
Recession, law of 73, 187
principles of, 66
Recessive elements, 68
Recurrence, 64
Recurrent, mental states, 23, 179
moment, 343
Redintegration of energy, 406
Reductive mass, 339
Reflex consciousness, 365
Reflexes, conditional, 22, 25, 37, 53, 397, 399
galvanic, 399
Reformed personality, 403
Relaxation, 366, 368
Reserve energy, 131, 132
neuron energy, 368, 369, 400
power, 401
Rest-cure, 346
Restitution of energy, 131
Reversion, law of 76, 80, 187
Ribakov, 179
Richet, 21
Romanes, 35, 40

Routine, 342, 343
Rudimentary organs, 356

Sachs, 129
Savadsky, 22, 63, 396, 397
Schmidt, 21
Schopenhauer, 98
Schultze, 63
Sclerosis of brain, 140
Seclusion method, 360
Secondary dementia, 84
Secretion, abnormal, 63
  glandular, 63
Selection, social, 1
Self-aggrandizement, 116
  analysis, 375
  love, 99
  pity, 347
  preservation, 34, 86, 88, 90, 96, 111, 116, 119, 122, 127, 162, 186, 194, 246, 342, 349
  regard, 66
Selfishness, psychopathic, 86, 87, 88, 118, 347
Sensibility of nervous organization, 111
Sensorium, 21
Sex, instinct, 82, 338
  reactions, 83
Sexual analysis, 338
  association, 347
  interest, 96
  life, 58
Sherrington, 24, 63
Signal of unreality, 398
Sleeping states, 131, 372
Social aggregate, 161
  law of, 27, 161, 162
  panic, 161
  reaction, 83
Somatopsychosis, 28, 30, 36, 57, 58, 90, 163, 331, 333
Sphygmograph, 160
Spinoza, 343
Stability of moments, 84
Stanley Hall, 51
Stage of excitement, 27
States, cognitive, 66
  hypnoidal, 74, 204, 206, 218, 246, 269, 347, 363, 364, 367, 370, 372, 374, 375
Static energy, 129, 130, 134
Stimulants, 27
Stimulations, ideo-sensory, 21
Stimulus threshold, 400
Subconscious associations, 372
  dream life, 260
  experiences, 372
  moments, 79
  regeneration, 73, 74, 76, 78, 79, 80
  self, 161
  shocks, IV
  states, causation of, 38, 41, 53, 57, 62
  systems, 69, 333
Subconsciousness, 90, 185
Suggestibility, 163
Suggestion, 357
Sully, 34, 41
Superior races, V
Sympathy, psychopathic, 87, 89, 97, 135
Symptoms, meaning of, 336, 337
Synthesis, principle of, 65
  of psychopathic aggregates, 69
Synthetic methods, 340
Systems, dormant, 403

Table of suggestibility, 364
Taboos, social, 59
Temperament, 185, 220
Test-dream, 230
Testing, 223, 226, 227, 228, 237, 239, 242
Theory of reserve energy, 402
Thresholds, 131, 396, 399 402,
  rise of, 400
  systems, 399, 407
Tics, 270
Tradition, 342
Trance states, 77, 347
Transformation of personality, 335, 403, 404, 405
Treatment, 184, 331, 333, 346, 350, 358
  hypnoidal, 150, 377, 378, 381, 383, 384, 386, 387
Tropisms, 349
Twilight states, 363
Types of organization, 349

Ultimate fear states, 67
Unconditional reflexes, 22, 398
Uncontrollable impulses, 78, 79
  obsessions, 70
Unification of consciousness, 365
Unreality, signal of, 398
Unstable minds, 111

Vanity, psychopathic, 87, 98, 112
Variability, 354
Vasiliev, 23, 63, 396, 398
Vaso-motor systems, 21, 54
Visceral functions, 21, 23
Vividness of consciousness, 73
Voluntary activity, 354
  association, 66
  control, 66

Waking states, 131, 364
War, European, 44
Weak nerves, 1
Weir Mitchell, 126, 155
  treatment, 358, 359
Will, 349, 400
  paralysis of, 406, 407
  psychopathic, 88
Wishes, psychopathic, 136

UNIVERSITY OF CALIFORNIA
Medical Center Library

THIS BOOK IS DUE ON THE LAST DATE STAMPED BELOW

Books not returned on time are subject to a fine of 50c per volume after the third day overdue, increasing to $1.00 per volume after the sixth day. Books not in demand may be renewed if application is made before expiration of loan period.

5m-3,'47(A2646s2)4128

RC601 Sidis, Boris.
S56 Causation and treatment of
1916 psychopathic diseases. 74313
ST.

Libra

74313

ARTI et VERITATI